

THE CHANGING CONTEXT OF HISTORIC URBAN PARKS:
AN ANALYSIS OF ADAPTIVE REUSE TECHNIQUES AND PHILOSOPHIES

by

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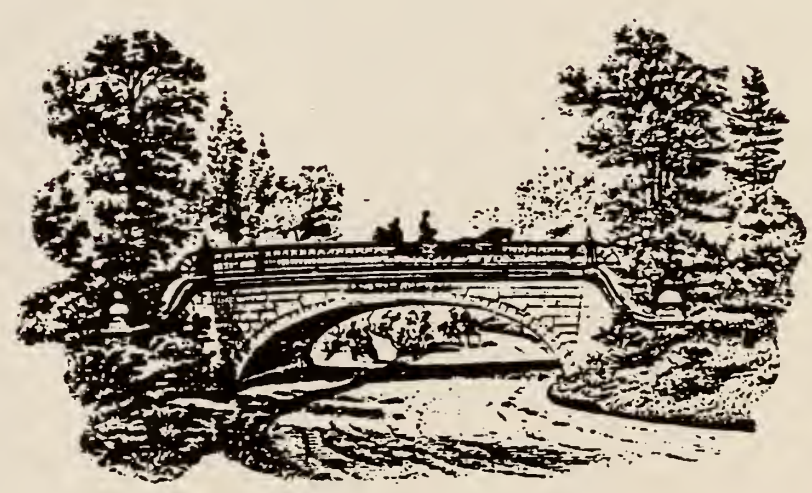


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When one walks through the Ramble (in Central Park), that yet-green woodland haven of birds and other small forest creatures, one wishes that the rest of the park could be more like it once was. Here in the heart of the city, rugged, wild, picturesque, and more or less intact, it is one passage of Olmsted and Vaux's "Greensward" symphony of rural scenery.

Elizabeth Barlow
(from Frederick Law
Olmsted's New York)

I. Introduction

When the Scajaquada Expressway in Buffalo, New York was routed through the center of Delaware Park, Mirror Lake was isolated from the rest of the park's design. A stadium and parking lot now stand in the once open North Meadow of Boston's historic Franklin Park. Central Park in New York City has been marred by a number of contemporary design additions, including playground equipment, parking lots, baseball fields and skating rinks. An eighteen-hole public golf course in St. Louis's Forest Park was designed so that several holes are played over and around the historic Grand Basin, a large formal

lake that is a remnant of the 1904 World's Fair. In each of these historic urban parks the original landscape design concepts have been obscured by a flood of special uses and encroachments. Enduring concepts of social reform through naturalistic park design have been blurred by noncontextual, unplanned design changes.

It is clear that to remain viable large public parks must respond to the changing functional or recreational preferences of its users by incorporating selected new uses. It is not clear, though, which planning and design strategies most effectively balance contemporary user needs with more elusive values such as historical and conceptual continuity. The danger is that a piecemeal, small-scale approach to park planning and design can result in the satisfaction of merely site specific, short-term goals, while important long-range goals related to conceptual integrity go unrealized. Park design concepts should be treated like the design elements they influence, with respect for their historic significance. The preservation of design concepts is, in fact, more important than the preservation of individual artifacts because it provides a contextual reference for the interpretation of design elements.

Some would contend that these original design concepts are no longer relevant in a changing society. I believe the concept of psychological and social reform

through passive recreation and naturalistic design in the urban environment is vital and very relevant. Historic concepts provide a framework for analysis; they do not preclude change. Urban parks can be adapted and reused in new ways while retaining their essential aesthetic and functional goals and structures.

This study will focus on "pleasure-ground" style urban parks. The problem of how to blend new uses into these large-scale urban parks is especially difficult. The designs of these parks have, in many cases, lost a sense of continuity as their conceptual frameworks became unfocused over time. The fact that they are large in size, functionally diverse, and naturalistic in character has caused many designers to conclude that small design changes are acceptable.¹ In many instances, incremental changes have combined to produce significant negative impacts.

Both "deliberate preservation" and "thoughtless eclecticism" can be the cause of these changes. Pockets of a design or special design features are preserved to reflect one park design type, while adjoining areas or features are of a different type.² In her book The Politics of Park Design Galen Cranz defines this process as "layering":

Layering softens the outlines of history even as it preserves the sense of it. The design

implication of this pattern of accumulation has all too often been a thoughtless eclecticism . . . when elements are picked without reference to their original meaning, and sit next to one another without creating a new meaning system.³

Layering occurs when the pattern of design changes in a park is not related to the park's original design concept and a new concept is not offered as an alternative. As a result, the park's design "loses an inner tension and vitality." Typically, a pleasure-ground style park will absorb design elements from several different park types. These elements will be placed next to, or be contained within, the original design features, with no attempt being made to blend them together. For example, new playground equipment is often inserted on the outer edges of a park. According to Cranz, pleasure-ground parks are suffering from an even more serious pattern of change. She writes: "Today an eclectic jumble of styles and services obscures the real movement of the history of urban parks, the gradual reduction in the range of social functions performed by the parks."⁴

The major goal of this study will be to determine whether or not layering is a significant problem in one pleasure-ground style urban park and if so, what techniques or philosophies have designers and planners implemented that have either expurgated or helped control this problem. Has the range of functions declined? This

study will also examine Patricia O'Donnell's thesis outlined in her article "Historical Preservation as Applied to Urban Parks," that the "optimal planning process" includes thorough historical research on the original design concept of the park and how the design has changed over time. O'Donnell's survey research indicates that landscape preservation professionals often fail to conduct adequate research into chronological changes in a park's design.⁵ This kind of information is critical if we are to avoid recycling design problems.

The crux of this thesis is a detailed examination of the chronological evolution of one urban park, Forest Park in St. Louis. This methodology will illuminate the complex problems Forest Park faces today and facilitate more educated conclusions and interpretations about how this park should be managed, what design changes are appropriate, and how these changes should be integrated into the existing design fabric.

Before we can arrive at conclusions we must first understand the history of urban parks in America and how the pleasure-ground park has experienced an erosion of its context. Then we will analyze the design concepts and elements typically found in these parks as influenced by the ideas of Frederick Law Olmsted. With this understanding we will begin to evaluate different techniques and philosophies of change management. Turning

to Forest Park, an image of layering will begin to emerge. A final design program or proposal for the core area of Forest Park will respond to this image of change and decay.

II. History of Urban Parks in America

Frederick Law Olmsted's and Calvert Vaux's 1858 "Greensward" design for Central Park in New York City set the stage for the development of large pleasure-ground parks in many cities across America: Prospect Park in New York City, Franklin Park in Boston, Balboa Park in San Diego and Forest Park in St. Louis. These parks range in size from 500-1,000 acres and were built between 1855 and 1900, usually on the periphery of large urban centers. Urban growth transformed the "country park" into the "central park," an oasis of naturalistic beauty in the arid monotony of urban sprawl. Olmsted refers to these parks as "the lungs of the city."⁶ The soft lines of a pastoral landscape, he believed, offered therapy for urbanites feeling the weight of the 19th century industrial cityscape. According to Galen Cranz, naturalistic urban parks serve two chief functions:

They manage to express a life force independent of social order. Plants subliminally represent the uncontrollable nature of the life force . . . Second, in a similar way, the very setting aside of ground for park activities is a collective recognition of the need for play . . .⁷

The turn of the century saw the emergence of the "playground" or "reform park." These parks were smaller in size (5-40 acres) and more tightly organized than the

big country parks. They were designed to fulfill primarily social goals such as education, good health and the assimilation of children and working immigrants into the new social structure.⁸ The expressly anti-aesthetic, monotonous, symmetrical layout of the reform park, with repetitive components such as a centrally located gymnasium, matched the rigid but purposeful social hierarchy of the day. An example of a reform park is Humboldt Park in Buffalo; recreational pursuits take precedence here.

From 1930 to 1960 parks were viewed as receptacles for active recreation facilities. A prescribed menu of single-function, loose-fitting design elements was offered as an alternative to theoretically-based design concepts. Park Administration journals helped promote this view of the urban park as nothing more than a loose collection of generic design elements--baseball diamonds, gymnasiums and play equipment.⁹ Declines in park budgets necessitated the use of mail order design packages and cheap construction materials.

As recreational preferences shifted toward an emphasis on more physical activities large urban parks gradually incorporated new sports facilities, from lawn bowling to baseball, tennis courts, gymnasiums and various other types of playing fields. These new uses added both functional and aesthetic "layers" that in many

cases obscured the existing context of naturalistic design elements. The pleasure-ground was becoming a "patch-work of special uses."¹⁰ Detroit's Belle Isle is an example of a park that in the words of Patricia O'Donnell, "suffered from the philosophy that 'more is better.'"¹¹

The 1960's saw the advent of a new theoretical approach to park design: the urban open space system. Whereas with the original country park concept the urban park was viewed as a separate green world in contrast to the city, now the city is celebrated with hard surface pedestrian malls, vest-pocket parks and such unlikely creations as freeway parks. City parks are addressed as only one component in a complex system of interdependent parts. Galen Cranz concludes:

The pleasure ground landscape shows the ideal of freedom of choice within the context of industrial order, the reform park the ideal of orderly industrialization in the context of a chaotic city, the recreation facility the ideal of a political machinelike efficiency in the context of a society fighting for economic and political hegemony, and the open-space system the ideal of vitality and viability in the context of a city threatened by a shift to suburbia.¹²

Urban planning departments after 1930 were incorporated into municipal governing systems, and later park plans were sponsored by state and federal

governmental bodies. Parks departments were increasingly estranged from the urban planning process. Legal barriers combined with a certain disinterest in parks among planners to effectively suffocate the role of park designers and landscape architects in urban planning up until about 1970.¹³

Changes were beginning to take their toll on the original design concepts of existing large-scale urban parks. Neoclassical buildings left over from the World's Fairs and associated with the City Beautiful Movement were overly elaborate and, in Olmsted's opinion, inappropriate. Buildings such as the Museum of Science and Industry in Chicago's Jackson Park did not blend with the more organic details of a naturalist park design: serpentine lakes, rustic arbors, stone bridges, masses of vegetation and rolling turf meadows.¹⁴ Olmsted preferred the rustic textures found in Richardsonian Romanesque architecture. New monuments and small-scale structures proliferated like gravestones in a cemetery. Referring to Jackson Park in Chicago Olmsted writes:

With regard to the subsequent occupation of ground by smaller structures, especially such as are of the class called pavilions and concession buildings, many of these have been inserted without consulting us; places being often given them in which they intercepted vistas and disturbed spaces intended to serve for the relief of the eye from the too nearby constant demands upon attention of the Exposition buildings.¹⁵

In 1914, the construction of the neoclassical wing of the Boston Museum of Fine Arts building, located in Back Bay Fens, symbolized the clash of ideas about what was appropriate design for these parks. Olmsted felt that civic institutions such as the Fine Arts Museum were incompatible both from a functional as well as an aesthetic perspective.¹⁶ The shimmering white reflection of the Museum building in the water of the Fens accentuates the crisp classical geometry that, to Olmsted, symbolizes the constraints and oppressive forces of society he was trying to escape by creating a natural haven.

Pressure to change the designs of Olmsted's parks was strong even in Olmsted's lifetime. In 1895, a major controversy arose over the addition of neoclassical design elements to the design of Prospect Park in New York City. The firm of McKim, Mead and White, led by Stanford White, proposed changes in the park's entrances that were in keeping with the architectural style of neoclassical grandeur. Olmsted argued vehemently against these architectural treatments, not because they were bad architecture, but because they would result in what he called a "weak, fragmentary and vacillating compromise between the two leading general motives."¹⁷ In addition to the neoclassical entrances, a peristyle, boathouse,

tennis courts and the Willink Entrance Comfort Station have been added to Prospect Park, all contributing to the gradual fragmentation of Olmsted's original design concepts. Elizabeth Barlow writes:

To see New York's parks is to realize the extent to which Olmsted's *rus in urbe* ideal has been distorted. The rambling ground in Morningside Park is now a weed-choked waste, and the alpine garden has been blanketed over by a school. Only a vestige of Tompkins Park in Brooklyn remains; its central plantation of trees has been replaced by a community center. Music Island in the lake in Prospect Park, where bands used to play on summer evenings, has disappeared beneath a popular but ugly skating rink.¹⁸

In "Central Park: The Genius of the Place," Henry Hope Reed notes:

Vistas have also disappeared in the Ramble where one could often view the Lake. Where there is now little but Knotweed in the Ramble, there was once a variety of groundcovers and even no doubt for a brief time, scattered flowers.¹⁹

Maintenance and safety considerations in urban parks have led to the removal of almost all shrubs, groundcovers and some trees. Dutch elm disease and lightning have also reduced the number of trees. When trees have been replanted, little concern has been given to choosing trees that are compatible with the original design concepts. In his book Forty Years of Landscape

Architecture, Olmsted says after analyzing changes made to Central Park: "In parts of the Park in which intricacy and low growth and picturesque obscurity had been required by the design, the natural underwood has been grubbed up."²⁰

It is extremely difficult but not impossible to manage and maintain a rural, country landscape in the middle of a large city. When problems do occur the public's image of the park changes, which often causes public support for park maintenance programs to wane; the park is increasingly perceived a nuisance and no longer a work of art. Vandalism and the presence of "undesirables" further tarnish the park's image. According to Olmsted:

. . . when the public by this laxity of guardianship had lost its respect for the restraint of liberty that was necessary to preserve the intended quality of landscape beauty, it is not surprising that an atmosphere of shabbiness grew and, in growing, engendered a public carelessness that in turn engendered ever more shabbiness.²¹

In addition to maintenance and safety problems, large urban parks have also suffered from encroachments by roadways. Roads have sliced off sections of Central Park in at least six different places. Similar examples can be found in Brackenridge Park in San Antonio and Balboa Park in San Diego. Curved roads have been straightened and made wider. Trees have been removed.

The noise and smoke of increased traffic pervade.

Incremental changes have combined to create significant impacts.²² These encroachments have been due, in part, to the fact that it is easier to obtain public park land than to create potential political problems trying to secure private land for roads. It is also easier to raze undeveloped park land. It was not until 1966 that legislative protection was afforded to "central parks" by the Department of Transportation.²³

Pressure has also been felt in the form of proposed special uses such as ball fields, skating rinks, golf courses, stadiums, recreation centers and museums.²⁴ The task of deciding which new uses are appropriate and how they should be blended into the existing design has been as much a political process as a design decision. In the case of Central Park, park commissioners and citizens' groups have successfully resisted major changes in the park's design.

Underlying all of these problems are problems related to the administration and management of large urban parks. The commissioner of parks theoretically has control over all design changes. In practice, however, other governmental departments such as the Highway Department and Public Works have control over many design details including signage and roadway details (such as guard rails). In Central Park, the Highway Department

planned to use metal guard rails until, at the last minute, the Park's Commissioner was informed and wooden rails were used instead.²⁵

Central Park has weathered threats to its design integrity mainly because the park's original design concept was so well conceived in terms of such things as the interrelationship of different circulation modes, the proportions or sizes of different spaces, and the sharp definition of edges. In order to separate vehicular and pedestrian traffic Olmsted (and his partner Calvert Vaux) proposed an innovative design solution that involved sinking transverse roads below the grade of the park, with pedestrian bridges located at selected points. Not only did this design feature solve an immediate problem, it also has allowed Central Park to successfully adapt to its changing context.²⁶

The park would contain, in all, four separate traffic systems: (1) the long, sweeping east and west drives for hackney coaches and carriages; (2) the bridle trail circling the reservoir and meandering elsewhere through the park, always carried by means of an underpass beneath carriage and pedestrian crossings; (3) a system of footpaths generally following the carriage drives "so that pedestrians may have ample opportunity to look at the equipages and their inmates"; and (4) depressed and made as unobtrusive as possible, the four sunken thoroughfares.²⁷

Despite its advantages, Central Park would not have survived the continual pressures from politicians, developers and institutions without the perseverance of Olmsted and various citizens preservation groups. These groups are quick to point out the history of bizarre proposals for changes in Central Park, including churches, a huge hotel, an automobile speedway, circuses, a maritime training facility, a permanent World's Fair and a landing field for airplanes.²⁸ Olmsted writes:

If all the applications for the erection and maintenances of towers, houses, drinking fountains, telescopes, mineral water fountains, cottages, Aeolian harps, gymnasiums, observatories, [and] weighing-scales, for the sale of eatables, velocipedes, perambulators, Indian work, tobacco, [and] segars, for the privilege of using steam-engines, snow-shoes, [and] ice-boats, and for the use of the ice for fancy dress carnivals, were granted, they would occupy a large portion of the surface of the Park, establish a very extensive and very various business, and give to it the appearance of the grounds of a country fair, or of a militia training-field.²⁹

Olmsted was one of the first men to boldly oppose politicians and developers eager to exploit park land. Effective resistance and stewardship on the part of Olmsted, his "path masters" and preservation groups such as the Friends of Central Park has made Central Park a relatively stable and enduring historic landmark.³⁰

Surviving such forces is a much more difficult and complex endeavor when a park's contextual references are radically altered as was the case with Franklin Park in Boston. Olmsted's turf Playstead was almost immediately overused, more bridle paths were desired and golfers swarmed the slopes. Both the Lemuel Shattuck Hospital and the White Schoolboy Stadium in Franklin Park were sited in conflict with the naturalistic design.³¹

Many urban parks experienced a change in character and meaning due to the changing demographic make-up of the city at its borders. The local neighborhoods by virtue of their close proximity to the park set the tone for park use, and as they change, so change the parks themselves. In his book, Open Spaces: The Life of American Cities, August Heckscher states:

. . . the original concept of the central park was frequently strained by changes in the social composition of the surrounding neighborhoods. Large mansions converted to apartments, crowded with the poor and with racial minorities, created a park public with other interests than the enjoyment of a romantic landscape.³²

In the case of Franklin Park, whites came to perceive the park as a part of the surrounding predominately black neighborhoods.³³ It has developed an image of decay as maintenance practices have declined.

Gentrification holds out dubious hope for resurgence in urban core areas, while large parks such as Franklin Park continue to be overused for some purposes such as active sports, and underused for their intended purpose, passive recreation. This does not mean, however, that passive recreation is no longer relevant to current use patterns. Patricia O'Donnell states:

As a result of both historical and contemporary research, it is the author's contention that the recreational pursuits of nineteenth-century park users were not radically different from those of today. The Olmstedian vocabulary translates fairly into contemporary terminology, and the theory of providing a number of grounds, varying in size and use, is equally valid.³⁴

There are a number of forces that contributed to the decline of the pleasure-ground parks. From the start, Olmsted's ideas on long-term management and contextual design were misunderstood or ignored.³⁵ Changing standards of beauty caused people to value architectural designs over purely naturalistic designs. There has been continual pressure from politicians, developers, public agencies and donors of memorial gifts to alter the designs of these parks.³⁶ Not all changes have been negative however. For example, improvements in the rail system and reducing interior vehicular penetration in Franklin Park have improved the park's pedestrian environment.³⁷

When researching pleasure-ground style parks the urban designer must examine the concepts and elements of design used by Frederick Law Olmsted. Olmsted's ideas were widely disseminated; every central park in America was designed with some reference to his park design concepts. An understanding of these essential concepts will allow the designer to read the signals of change in a park's design, to map out the process of change and analyze it with reference to original design concepts. Ultimately, the designer will be able to make reasoned conclusions about which historical changes in a landscape have been positive and should be maintained within the design framework, and which changes conflict in some way with the design concepts and should be altered accordingly to revive the historic integrity of a park.

III. Frederick Law Olmsted's Social Goals and Design Concepts

In the mid-1850's, American cities suffered from a myriad of social ills: pollution, disease, waste, urban blight, overcrowding, strained family life, poverty, crime, exploited labor and ineffective educational systems. Depression, despair and hostility were commonly felt emotions. Industrialization had created a separation of work and home, of commercial and domestic; and the commercial threatened to dull the sensibilities of man. Frederick Law Olmsted felt that environmental design could be a powerful tool to combat the pressures of city life.

According to Olmsted's utopian, semi-transcendentalist philosophy, influenced by Thoreau and Emerson, divinity is experienced through the natural environment that reveals God's rhythms and harmony.³⁸ Nature expresses a "strong moral impression." Olmsted believed that certain ideal land types can improve the spiritual health of man. He was particularly enamored of the gentle, rural English landscape.³⁹ His goal was to provide the city dweller a tangible, if artificial, link to the natural world. In the words of Elizabeth Barlow, Olmsted's designs allowed "man to confirm with his senses

that he lives in a world of seasonal rhythms--of vernal buds, falling leaves, drifting snow."⁴⁰

Olmsted viewed Landscape Architecture as a means to promote moral and physical health, the general reform of the human spirit, as well as a means of artistic expression. His goals for design were realized in social and psychological reform that stressed good health, a cheerful attitude, morality, a sense of purpose, and an ordered, whole domestic life.⁴¹ Reform of the human spirit is attained by experiencing nature in symbolic or stylized "passages." Democratic ideals of freedom and consensus, rooted in Jeffersonian ruralism and connected to Protestant theology, provided substance for Olmsted's ideas on social reform.⁴²

In the soft curves of the English landscape, sculpted by designers such as "Capability" Brown and Humphrey Repton, Olmsted found an ideal model for his design ideas. Olmsted authored Walks and Talks of an American Farmer in England after visiting England. In glowing prose he writes: "The Country--and such a country--green, dripping, glistening, gorgeous."⁴³ Olmsted was most directly influenced by the designs of Repton, who synthesized the soft and perfect curves of Brown's pastoral style with the rougher seams of the picturesque school to form a fairly broad and eclectic

palette of borrowed design elements and images.⁴⁴ In the words of Cynthia Zaitzevsky:

He (Olmsted) used the "Picturesque" style in its narrower sense--that is, the Picturesque as opposed to the Sublime or the Beautiful--very selectively. His choice for country parks was invariably the Beautiful or Pastoral, as it is more conveniently called: a mode of landscaping in the direct tradition of Capability Brown, featuring broad open meadows or greenswards, set off by low hills, lakes, and groups of trees.⁴⁵

Repton believed that landscape design concepts should be flexible enough to address the unique qualities of a particular site. Like Brown, Repton used the palette of trees, turf and water for his residential designs. He also added more formal, "intimate gardening effects" near the residence to add a rich, exotic flavor to the overall composition.⁴⁶

Olmsted was also strongly influenced by two books written at the end of the 18th century that defined the principles of painterly composition and idealized natural forms: On the Picturesque by Sir Uvedale Price and Forest Scenery by William Gilpin.⁴⁷ Price lauded the paintings of Lorrain and Rosa that displayed the picturesque qualities of rugged beauty. Price did not find Brown's smoother lines ennobling or beautiful. Gilpin's work includes analysis of the aesthetic qualities of different tree specimens and praise for variety in landscape design,

"where one part is continually playing in contrast with another."⁴⁸ In America, Andrew Jackson Downing applied these ideas as precepts to rural landscape gardening at a residential scale.

Visual unity was of primary concern to Olmsted. Like Repton, Olmsted synthesized different design elements into a varied but coherent and unified whole. In his essay entitled "City Parks and Improved Use of Metropolitan Spaces," Olmsted states:

. . . either by contrast or harmony all details should be auxiliary to this central interest. In a work of the kind before us there may be--almost necessarily must be--several more or less distinct fields of design, but it is desirable that there should be a studied artistic relation of support by harmony, and of emphasis by contrast of character between the different fields. The element of interest which undoubtedly should be placed first, if possible, in the park of any great city, is that of an antithesis to its bustling, paved, rectangular walled-in streets; this requirement would best be met by a large meadowy ground of an open, free, tranquil character.⁴⁹

As stated earlier, Olmsted was not against architectural forms in general, but merely the unplanned mixing of incompatible design elements without reference to an overall scheme. According to Olmsted: "in natural gardening artificial elements are employed adjunctively to designs, the essential pleasure-giving character of which is natural."⁵⁰

The difficult challenge was to blend the curvilinear forms of the English natural style into the rectilinear gridded street plan of the typical 19th century American city. Olmsted's solution was to blend his designs on the level of psychological and ecological meaning by creating a tension between opposite conditions. The naturalistic design of the park finding justification and purpose as a means of achieving a spiritual catharsis of the soul; relief from the inhumane and unbalanced urban conditions that make up the park's context. Strongly defined boundaries, manipulated view sheds, and separated traffic modes resolve this inherent conceptual conflict.

An examination of Olmsted's writings reveals a typology of park use that further clarifies the conceptual framework of his designs. Olmsted defined two major types of park use: "exertive" and "receptive." Exertive recreation includes athletic sports, such as baseball and tennis, as well as games of mental skill, like chess, where "the predominating influence is to stimulate."⁵¹ Receptive recreation, on the other hand, refers to more passive activities, such as musical concerts or simply strolling with friends where one receives "pleasure without conscious exertion."⁵²

Receptive recreation is further subdivided by Olmsted into "gregarious" and "neighborly" types of recreation. Gregarious recreation involves the coming together of

large numbers of people to promenade, talk or meet people, such as occurs in the promenade of the Champs Elysees in France or the Bethesda Fountain and Mall in New York's Central Park.⁵³ Describing this type of recreation Olmsted writes:

Consider that the New York Park and the Brooklyn Park are the only places in those associated cities where . . . you will find a body of Christians coming together, all classes largely represented, with a common purpose, not at all largely represented, not at all intellectual, competitive with none, disposing to jealousy and spiritual or intellectual pride toward none, each individual adding by his mere presence to the pleasure of all others, all helping to the greater happiness of each.⁵⁴

A Promenade may, with great advantage, be carried along the outer part of the surrounding groves of a park; and it will do no harm if here and there a broad opening among the trees discloses its open landscapes to those upon the promenade. But recollect that the object of the latter for the time being should be to see congregated human life under glorious and necessarily artificial conditions, and the natural landscape is not essential to them . . . men, women, and children are seen sitting here and there, forming groups in the shade, or moving in and out among the woody points and bays.⁵⁵

The second type of receptive recreation, neighborly recreation, refers to relatively small, private groups gathering and picnicking in a refreshing pastoral environment.

The circumstances are all favorable to a pleasurable wakefulness of the mind without stimulating exertion; and the close relation of family life, the association of children, of mothers, of lovers . . . stimulate and keep alive the more tender sympathies, and give lay to faculties such as may be dormant in business or on the promenade. . . .⁵⁶

Olmsted's designs allowed for a range of different uses by providing a variety in size and function of different spatial elements. His concepts are clearly illuminated in the physical design elements he employed.

Patricia O'Donnell defines nine "critical design qualities" of Olmsted-legacy historic urban parks. The following is a list of these essential components: (1) profuse plantings (native and nonnative plants, casual and formal, dense massing, broad palette, textural variety, controlled views, pastoral effect, sense of mystery); (2) spatial extension (spaciousness, opening and closing of views in a continuous sequence, broad vistas); (3) separation of different circulation systems (transverse roads, grade changes, formal vs. informal); (4) separation of activities (physical distance, screening with landforms and plant materials, clustering of similar uses); (5) structures and site amenities integrated into the landscape (location, site design, planting design, architectural styles); (6) formal gathering spaces for large numbers of people (linear promenade or geometric shapes, edged with trees, formal detailing); (7) natural

spaces (buffered from city, meadows, forests, serpentine water bodies, rock outcroppings); (8) active recreation facilities (location, site design, circulation, planting design); (9) design for overall harmony (single elements don't draw attention, dominant naturalistic motif, clustering and screening, rustic architecture).⁵⁷

In the essay "City Parks and Improved Use of Metropolitan Spaces," Olmsted describes the natural spaces found in Buffalo's South Park design proposal:

By varying the conditions, so that the water will at points be comparatively shallow and at others deep, and the land at points low and at others high, the shores here abrupt, there gently inclined; . . . an extended series of interesting passages of scenery will result. At intervals there will open long vistas over water under broad leafy canopies; there will be coves completely overarched with foliage, forming verdant grottoes; some of the islands will be large enough to have within them spacious forest glades; some will be low and densely wooded, their shores so shallow that boats can not land upon them, and their skirts so hedged with thickets as to be impenetrable.⁵⁸

O'Donnell describes how plant materials were used:

Selection was not restricted to native materials but included all plants adaptable to the region. The qualities of each setting were created with plantings; trees were spaced singly or in small groups on a grassy meadow to produce a pastoral effect; stepped materials were composed in masses to enclose and direct views while defining spaces; dense, varied materials were planted on rough ground creating

a dappled light and shade to simulate a wild, mysterious environment.⁵⁹

It becomes immediately obvious that these landscape elements are anything but pristine; they have been carefully manipulated, shaped and refined into artistic "natural" forms. According to Olmsted, "A great object of all that is done in a park, of all the art of a park, is to influence the mind of men through their imagination . . ."⁶⁰ In this process, it is the intent of the designer to quote "passages" of rural scenery and effect the appearance of naturalness by preserving and enhancing where desirable the original character of the land.

This becomes quite an elusive goal given the list of required park functions including institutional architecture, golf courses, other athletic facilities, roadways, pathways, monuments and the negative visual intrusions at its edges of banal urban architecture. It is an attainable goal if in all planning and design phases the basic design goals are kept foremost in mind. Every detail should respect and enhance the overall design concept.

During fourteen years the whole work of the Central Park centered, as has been shown, upon three branches of a single purpose: first, the putting out of view of exterior buildings by a suitable disposition of tall growing trees second, the formation of a series of broad, simple meadow surfaces, with, when practicable,

such a disposition of umbrageous trees, without underwood, as would render their limits undefined; third, the development of a series of landscape passages strongly contrasting with those of the pastoral and high wood districts in complexity of grouping, and the frequent density, obscurity, and wild intricacy of low growing foliage, especially on broken and rock-strewn surfaces. The permanent accessory elements of roads, walks, arches, and other structures had been located and designed in strict sequence and subordination to these purposes; as little as possible to conflict with them, as much as possible to support them.⁶¹

Olmsted goes on to analyze the questions: how is a pleasure-ground made functional and flexible in the urban setting while retaining its essential natural character, and what is the role of architectural design elements in the larger design concept?

In all much frequented pleasure-grounds, constructions of various kinds are necessary to the convenience and comfort of those to be benefited; their number and extent being proportioned to the manner in which they are to be used, and to the number of expected users. If well adapted to their purpose, strongly and truly built, the artificial character of many of these must be more or less displayed. It is not, then, by the absence nor by the concealment of construction that the natural school is tested.⁶²

On the other hand, the principal elements of scenery in architectural gardens, even of such extreme types as that of Versailles, is found in verdure. It is not, then, by the absence nor the concealment of productions of nature that the architectural school is known. What remains as the essential distinction between the two would seem to be, simply, that in architectural gardening, natural features are employed adjunctively to designs, the essential

pleasure-giving elements of which are artificial, while in natural gardening artificial elements are employed adjunctively to designs, the essential pleasure-giving character of which is natural.⁶³

When judging architectural elements for contextual appropriateness Olmsted asks the question: ". . . in what degree and whence the structure will be conspicuous after it shall have been toned by weather, and the plantations about and beyond it shall have taken a mature character."⁶⁴ Statues or sculptures should be chosen on artistic merit alone. Site details such as bridges and walls are done in native stone to express the dominant naturalistic tone. Benches, lighting features and other site details have curvilinear, organic lines that recall nature's beauty.

According to Olmsted, a metropolitan scheme of public grounds must accommodate a fairly wide range of activities with a mixture of different design passages. The park user moves through each new passage, experiencing "kinetic, sequential experiences" that are linked together by memory.⁶⁵ Each experience must be in harmony with the character of the sequence. Each passage must respect its context and not encroach upon nearby passages. In "City Parks and Improved Use of Metropolitan Spaces," Olmsted concludes the following:

Places are needed where military and athletic exercises can be carried on without conflicting with the pursuit of business and the safety or the quiet of those not interested in them. Civic ceremonies, music and fireworks should also be provided for, and a more secluded, quiet, and purely rural district should be added, in which invalids and women and children may ramble, or rest in the open air, free from the disturbance of carriages and horsemen.⁶⁶

Olmsted stresses that, "the line between one class of grounds and the other must be sharply defined so that it cannot be passed unconsciously even under excitement."⁶⁷ Location of the different grounds or zones should facilitate contextual compatibility. For example, Olmsted describes how a zoo should be sited in a large urban park:

Suppose a park in the interior of which there are open areas large enough to establish a character of landscape spaciousness and to allow that form of beauty to be enjoyed which can only be had in looking to a distance across broad openings of woodland. In the shadow of the outer wooded parts of such a park, the structures necessary for the zoological collection might be so disposed that they would stand veiled from view across the openings and not be in any way obtrusive upon the natural scenery.⁶⁸

Careful planning can make a park richly varied, yet tightly unified, where every detail is subordinate to the leading ends. Active recreation areas and formal gathering spaces should be clustered and insulated from

the prevailing natural areas using sharp vegetational and topographic edges and buffers. O'Donnell explains:

As an example, the principle of separation of activities could be used to place a visual and aural barrier between a picnic area and nearby tennis courts. A planted berm, dense on the picnic side and used for informal seating on the tennis side, would provide an appropriate solution. The form of the berm would be irregular, with plantings varied, applying the planting principle in their selection. In another situation, a new soccer field might be placed at the edge of a meadow, in an area where the ground is relatively level, and the uprights placed carefully so as not to obstruct the vista. Minimal grading or vegetation removal would be necessary and the quality of the space would be retained, satisfying the spatial extension and harmony principles.⁶⁹

A proper balance of design passages, some clustered, screened, aggressively contained, others subtly blended, allows a park to change and grow smoothly, making the change management game much easier. Good design always facilitates flexibility and efficiency in change management practices.

IV. Preservation and Adaptive Reuse Design Strategies

Olmsted stressed the importance of making a commitment to the long-term maintenance and management of a park before it is built. He also advocated a periodic review of the social, ecological and aesthetic aspects of a park's design. Planning efforts should always be guided by a clear understanding not only of current needs but of the historical context of a park, he believed, including the original intentions of the park's designers. How has the park changed and what planning and design lessons can be learned from past successes and failures? In the following quote, Olmsted outlines the causes of the numerous management problems that have threatened the design integrity of Central Park and other similar parks:

First, failure to understand clearly that adherence to some self-consistent controlling purpose and policy is essential to good results in the management of any long-term investment of a sort readily subject to depreciation like the Park, and failure to live up to such an understanding with courage and energy. Second, inability to comprehend the special justifying purposes and values appropriate to the Park, and failure to appreciate the technical means necessary for preserving these in the face of greatly increased use. Third, subordination, whether conscious or unconscious, of the motive of effective management of the Park as an instrument of public service to other motives

. . . .⁷⁰

The range of planning options reflects the different philosophies of preservation. Kunst and O'Donnell define historic preservation as:

. . . a process of stabilizing, rebuilding, maintaining or improving the condition and specific qualities of an historic landscape so that the landscape is protected and the design intent fulfilled.⁷¹

The preservation process has five phases: (1) identification; (2) evaluation; (3) protection; (4) physical preservation; and (5) enhancement.⁷² There are five major types of preservation strategies according to Kunst and O'Donnell:

- (1) Conservation is a passive process of preservation. It protects an historic landscape from loss or the infringement of incongruent uses. Basically, it is stewardship of a site.
- (2) Restoration connotes return of a site to its original appearance during a selected period. Strict authenticity of overall form and detail requires extensive research and funding. (Rehabilitation and reconstruction are related methods.)
- (3) Adaptive Reuse (or Interpretation) can be defined as basic retention of the original landscape form with the integration to accommodate new uses, needs and contemporary conditions. It involves research of the original design intent and use. The design should reinforce historic integrity while integrating a contemporary site program.

- (4) Rehabilitation returns an historic landscape to useful condition, generally bringing it to a state of good repair and possibly including some adaptation. The degree of authenticity is secondary.
- (5) Reconstruction applies to the reproduction of a complete landscape setting which may not be on an original site. It starts from the ground up. Evidence of former conditions is gathered from documents, photographs, sites and other resources. Authenticity depends on the research base and funding available.⁷³

According to Galen Cranz, planning style is critical. Cranz offers an alternative perspective with the idea of "populist planning." A populist planner would be "responsible to the population rather than patronize it, but retain inspiration and care."⁷⁴ The author applies a nurturing or parenting image of "mutual aid" in all collective endeavors. Cranz's image is valid; it displays an inspired idealism that is a necessary foundation for the planning process.

In the end, however, less theoretical and more pragmatic strategies will offer the best guidance for the design professional. Before he can make intelligent decisions about the relative effectiveness of different design concepts, the planner or designer must understand the adaptive reuse process, a form of change management. In her article, "Historic Preservation as Applied to Urban Parks," Patricia M. O'Donnell defines the "ten

consistent elements of an optimal (adaptive reuse) process." The following is a list of these elements:

1. Commitment and involvement of a private group or groups.
2. Commitment and involvement of local government officials and staff members.
3. Awareness and input of the general public.
4. Carrying out of thorough historical research that details the original design and chronological development of the park.
5. Complete analysis of existing physical conditions.
6. Documentation of current use, perceptions, and preferences through behavioral research.
7. Synthesis of historic and contemporary research findings to form a philosophical basis for the design approach and subsequent recommendations.
8. Proposal of design recommendations that balance historic integrity and contemporary use.
9. Proposal of management strategies that will retain the public landscape in good condition, while recognizing limitations of manpower and materials.
10. Implementation of the recommendations through the continuing commitment of design professionals, private groups, and local government.⁷⁵

O'Donnell compares seven adaptive reuse projects, giving each one a subjective score from one to five on each of her ten elements of "the optimal process." The

parks she looked at were: Delaware Park in Buffalo, New York; Cherokee Park in Louisville, Kentucky; Back Bay Fens in Boston, Massachusetts; Franklin Park in Boston; Ravenna/Cowen Parks in Seattle, Washington; Colman Park in Seattle and Bryant Park in New York City.

The results of this analysis yielded conclusions about the current state of the adaptive reuse process as applied to urban parks. O'Donnell found that private group and local government commitment was high, while the level of public involvement was usually low. (One way to improve public involvement is through the use of behavioral research.) In the category of historical research there are inconsistent scores. A common problem is the lack of research on historical changes in a park's design.⁷⁶ Professionals rated high on site analysis, but low on current-use behavioral research. Problems in base information such as insufficient behavioral research lead to low scores on what O'Donnell calls the "synthesis" step of the process. She suggests how the synthesis stage should occur: "The stance of the Landscape Architect would best be one of sensitivity to historic integrity, balanced by current needs and preferences. The original design construct could then be applied to the existing landscape."⁷⁷

The case of Franklin Park, in Boston, illustrates how "enhancement" can be defined in different ways. The 1978

Master Plan for Franklin Park, prepared by V. Michael Weinmayr Assoc., was highly controversial; the Franklin Park Coalition was critical of the plan on the grounds that the concept was insensitive. The Coalition argued that excessive improvements would be expensive and might obscure the existing scenic beauty of the park. Despite these objections, the Master Plan Proposal was in keeping with the Olmsted-legacy tradition of enhancement and creative and sometimes bold manipulation of existing and new design elements. O'Donnell states:

The plan, based on a premise of underuse, sought to increase the popularity of the park through substantial physical improvements. The Country Park landscape was to retain its scenic beauty and, with the development of an extensive trail system, become more accessible to park visitors. Access to the park was also to be improved, with the construction of three pedestrian overpasses. Other elements of the plan included the decreasing of the golf course to nine-hole size; the initiation of selected new plantings; the restoration of several overlooks, with one as an outdoor theatre; the adaptive reuse of the bear dens; the blocking of vehicular access to the interior; and the screening of structures with appropriate plantings.⁷⁸

In order to design with sensitivity to context, the Landscape Architect must categorize and evaluate the various types of project information at his disposal. Not all designers will use information the same way, but information is fundamental and indispensable nonetheless.

Stephen Jacobs and Barclay Jones categorize the different types of resources that reveal a landscape context in City Design through Conservation. The authors define three general categories of information: (1) functional distribution of activities, (2) existing elements that provide symbols, and (3) existing elements that provide visual character.⁷⁹

The functional distribution of activities refers to the existing social patterns. In his classic work Image of the City, Kevin Lynch outlines a theory of environmental perception based on the idea that the individual creates a mental picture of the relationships between different parts of a city. Lynch believes the essential elements of an individual's perceptual image are common to everyone. He defined five interrelated elements that make up a person's image of the city, four of which would fall into the category of "functional distribution of activities." These four elements are: (1) paths - major corridors of movement which provide viewing points of other elements; (2) districts - sections of the city having common forms and activities in which building forms are important elements; (3) edges - divisions between districts which can be paths; (4) nodes - major hubs of activity that are usually open spaces and which provide a focus for orientation.⁸⁰

Lynch defined a fifth element, the landmark, which fits into the second category of resources outlined by Jacobs and Jones. "Existing elements that provide symbols" can be landmarks, major buildings, unique topographic features, and visually important plant materials. These elements serve as symbols and aid in orientation as well. Existing symbols give the designer a resource to help create "differentiation, orientation and comprehension" in a new design that is set in an old context.⁸¹

The third category of resources outlined by Jacobs and Jones is "existing elements that provide visual character," such as the color and texture of materials in buildings or landscape elements, scale, spatial definitions, ornamental details, planting design elements, water features and street furniture. These elements give an area its indigenous visual personality. When mixing new construction with existing elements the designer should respect this personality; indigenous visual experiences should take precedence over "artificial and arbitrary ones."⁸²

Construction materials can be important visual elements; they can have a dramatic impact on the character of a landscape. The use of indigenous materials can help create continuity. In the absence of local precedent, the designer can turn to the larger regional context for

inspiration.⁸³ Visual memory can be powerful. People can perceive continuity in the use of materials in a regional context. For example, the use of limestone for retaining walls would seem natural in any town in Kansas even if a town had no other walls made of limestone that would be local contextual elements.

Details in the form of ornamentation can also be critical elements. A form of texture, ornamentation can make a design blend well even when other elements are treated poorly. People appreciate ornament both from an aesthetic and a symbolic perspective. Jacobs and Jones comment on the importance of ornamentation in design:

The "unnecessary" refinement, the reference to tradition or symbol, the surprise that is carefully staged, still provide what Berenson called "life enhancing" experiences. All of these presuppose a relationship to a milieu, or a conscious deviation from the norm. They imply a respect for and willingness to capitalize on pre-existing forms or ideas.⁸⁴

Another important visual element is relative scale. Relative scale has "emotional as well as practical implications."⁸⁵ The designer must be aware that the urban landscape is a delicately balanced composition made up of a variety of sizes of spaces and a blend of open vs. enclosed spaces. Any attempt to blend new design elements into the existing landscape must be sensitive to this balance. Spatial experiences related to the balance

of mass and void can be important to the success of an urban landscape design. The Landscape Architect can make a significant contribution towards realizing a delicate balance of scale in the urban environment.

Brent C. Brolin, in his book Architecture in Context, says there are two basic options open to the urban designer in regard to the treatment of contextual elements, with many graduations in between. On the one hand, you can make a "less literal connection" to the context which involves difficult and necessarily innovative solutions. On the other hand, you can make a "closer connection" to the context by using motifs derived directly from the existing style. Brolin feels this second choice is a valid alternative that has been ignored by architects who are too concerned with originality and not concerned enough with craft.⁸⁶

Focusing on architectural examples, Brolin outlines four ways a visual connection can be made: (1) closely copying the existing design (Frick Museum Addition, Boston), (2) using basically similar forms but rearranging them (Brant House, Bermuda), (3) inventing new forms which provide a similar visual effect as the old (Quincy Market, Boston), (4) abstracting the original forms (National Permanent Building, Washington, D.C.).⁸⁷

One change management strategy has been to develop legally defined design guidelines for new architectural

construction in an area defined as an historic district. In Savannah, Georgia, for example, a detailed ordinance was passed that defined certain "visual compatibility factors" that new construction had to conform to. The factors were: (1) height, (2) proportion of building's front facade, (3) proportion of openings within the facade, (4) rhythm of solids to voids in front facades, (5) rhythm of buildings on streets, (6) rhythm of entrance and/or porch projection, (7) relationship of materials, texture and color, (8) roof shapes, (9) walls of continuity, (10) scale of a building, (11) directional expression of front elevation.⁸⁸ A similar system could be adapted to focus on landscape design elements.

The range of design options, from resisting change totally to allowing unchecked organic decay, makes the game of change management quite difficult. Every situation is unique; every urban space is different. It is possible, however, to manage change successfully. Seward Park in Seattle and Tower Grove Park in St. Louis are examples of historic urban parks that have been properly maintained and sensitively altered through their history.⁸⁹

Forest Park in St. Louis has remained conceptually loose, adapting to meet the needs of the public. This strategy has had mixed but generally positive results. A

rich weave of diverse design "layers" covers the park. New and old are contrasted in every detail.

Adaptability and flexibility are the marks of good design; change should be viewed as a positive force. Change must be planned, however, and tempered by sensitivity to the existing landscape context. Decisions about how to adapt historic parks for new uses must, according to O'Donnell, be based upon a synthesis of current use data and historical research. Research may reveal that current uses are not always in conflict with historic principles. We may find that today's urbanite, like his counterpart in the 19th century, is still yearning for a taste of nature's "seasonal rhythms--of vernal buds, falling leaves, drifting snow."

V. Methodology

The major aim of this study is to trace the history of design changes in one historic urban park, Forest Park, in a case study analysis; and to isolate, define and evaluate design problems and the different adaptive reuse design strategies employed to manage these problems; and to analyze the relationship between these strategies and the park's original Olmsted-legacy design concepts.

In her article entitled "Landscape Research: Keeping Faith With Today and Tomorrow," Catherine M. Howett outlines three different categories of landscape research: (1) "the cultural context, the whole complex of philosophical, economic, political, social, scientific, literary and aesthetic factors that together, shape the "zeitgeist" of a given age . . .," (2) "the site itself, whatever survives of the actual landscape," and (3) "a search for any available documentation of the evolution of the site over time."⁹⁰ This study is basically of the third type, hopefully correcting an imbalance in the focus of contemporary landscape research trends.

The basic research model is taken from Patricia O'Donnell's previously mentioned article: "Historic Preservation as applied to Urban Parks." O'Donnell writes:

An approach that could prove useful in sorting out these issues, and thus creating a sound synthesis, may be the adaptation of the philosophy and resulting design principles of the original designers and the application of these to the current situation. The historical research phase should yield, from graphic and written sources, required information about the original park design. The behavioral research phase and input from the four client groups should define contemporary goals and objectives.⁹¹

Jacobs and Jones also suggest a methodology for tackling the complicated decisions a designer must make related to landscape context. They suggest developing what they call a "visual program" in order to organize resources. There are four basic steps involved in developing such a program. First, study the survey records of the specific site, the adjacent sites, and the regional context. Second, study the history of the area, including the original land planning, changes in land design, changes in land form and the history of landmarks and make a historical map with annotations. Third, make another annotated map with literary notes that provide a narrative of the different types of social experiences and where they occur. Finally, make a map showing important linkages between different functional areas.⁹²

The case study of Forest Park will employ a system similar to the "visual program." Site analysis information on the current physical state of the park includes photographs, plan view maps, notes on visual

perception, and notes on current use patterns. Detailed analysis focuses on the "Core Area" of Forest Park.

Sources of information on original design concepts and design changes include knowledgeable individuals (planners, designers, administrators, preservationists, members of civic groups); and graphic and written archival data from parks departments, public libraries, historical societies and the records of design professionals (maps, paintings, photographs, annual reports, newspapers, government documents, economic data, diaries and letters).

The information obtained includes (1) written and graphic analysis of the original design concepts for Forest Park, (2) written and illustrative history of changes in Forest Park's design, (focusing on the introduction of new functional uses and new aesthetic styles), (3) written, photographic and graphic site analysis of current park conditions and current user patterns, (4) written conclusions about adaptive reuse and change management design strategies, (5) written proposal for changes in the design of Forest Park based on interpretation of historical concepts and perception of contemporary needs, (6) graphic presentation and description of the author's proposed adaptive reuse site plan for Forest Park's Core Area.

The primary research sources for this study include the 1875 Report of the Commissioners of Forest Park, executed by Maximillian Kern, the Annual Report of the Park Commissioner (1876-1908), the Annual Report of the Park Department (1909-1926), and the Annual Report of the Division of Parks and Recreation of the Department of Public Welfare (1926-present). From 1949 to the present, the primary sources are newspaper clippings from the St. Louis Post Dispatch and the St. Louis Globe Democrat. Other key resources include the George E. Kessler Papers, (Kessler was Chief Landscape Architect for the World's Fair Restoration Plan); Kessler's official report to the Director of Works for the World's Fair (outlining the World's Fair design concept); Kessler's official report on the restoration of the park after the World's Fair; and the 1976 Master Plan Proposal for Forest Park.

Key secondary sources include Remembering The St. Louis World's Fair, authored by Margret Johanson Witherspoon, Art Sculpture and Architecture: World's Fair, St. Louis, in the Charles Monroe Reeves Papers, and an excellent, comprehensive and up-to-date history of Forest Park (with many excellent maps), Forest Park by Caroline Loughlin and Catherine Anderson.

Flexible design strategies have facilitated an intricate weave of design layers in Forest Park. The history of the park provides an interesting case study of

how, according to Galen Cranz, the range of social functions in urban parks has changed over time. This study will focus on the Core Area in order to provide an in depth and comprehensive analysis. The Core Area of Forest Park has experienced a rich history of change. It is located in the north central portion of the park where the Hippodrome, The Meadow and a naturalistic lake originally existed and where part of the Municipal Golf Course, the Tennis Center, parking areas and the altered lake design currently exist. This area was originally conceived as a part of the primary naturalistic space in the park; then with the World's Fair design it became the centerpiece of the park's formal space. It is now caught in limbo between these poles without a clearly defined purpose. Analysis of this significant area and a proposed design for it will complement a more general analysis of changes in the park as a whole.

The only place in the park which remains much as God made it is the small forest in the southwest corner near the intersection of Skinker Boulevard and Clayton Road.

St. Louisans have here a precious possession -- a miniature sample, deep in the busy, teeming city, of that wilderness which long ago stretched from the Mississippi Valley to the Atlantic Ocean and the Gulf of Mexico.

Earl W. Kerster
(from "The Forest in
Forest Park")

VI. A History of Design Changes in Forest Park

Forest Park in St. Louis, Missouri is an example of pleasure-ground style park that has weathered numerous changes to its design. The park has remained a dynamic and viable cultural resource because it has changed and adapted to meet the needs of the public. The St. Louis Exposition of 1904 set the tone for drastic changes in the park, and focused attention on new social problems that demanded reform. Seventeen thousand trees were felled to make room for the exposition. The history of Forest Park

is ripe with other examples of multilayered design changes.

Forest Park's original design concept, developed by Maximillian Kern, was heavily influenced by Olmsted's ideas, although it was somewhat eclectic and slightly ambiguous. A legacy of ambiguity has generally helped produce a flexible and evolving park design that has been responsive to social needs. August Heckscher writes: "If Central Park in New York has survived as a powerful civic asset because it resisted change, Forest Park has survived and on the whole, has prospered because it accommodated itself to new needs and to new social doctrines."⁹³

It has been a mixed legacy however; accommodation has in many cases produced tension and a lack of definition in the design of Forest Park. The Core Area of the park in particular suffers from ambiguity. An examination of the history of design changes in Forest Park will clarify this contradiction. It may also provide evidence of problematic layering.

Maximillian Kern was undoubtedly familiar with the landscape design concepts of F. L. Olmsted. In fact, he met Olmsted once at the home and gardens of Henry Shaw in St. Louis. Both men were involved in the new art of Landscape Gardening. Kern had written Practical Landscape Gardening, a book that Olmsted had read and admired.⁹⁴ Like Olmsted, Kern studied in Europe, working at the royal

gardens in Stuttgart and the Tulleries Gardens in Paris. Kern designed Lafayette Park in St. Louis before Forest Park, and later designed the Compton Hill and Chain of Rocks reservoirs and the residential plans for Portland and Westmoreland places in St. Louis.

When Kern submitted his master plan for Forest Park work had already begun on several roadways and drainage lakes in the park. By authorizing a landscape plan, the park commissioners hoped to avoid "every chance whim of passing fancy of the future."⁹⁵ Kern's plan was included in the first annual report of the Superintendent and Landscape Gardener's Department of Forest Park, dated January 1st, 1875. In this report, Kern describes the existing conditions of the park land before improvements. The park has three distinct parts according to Kern: the upland plateaus (south of the river), the valley meadows (north of the river), and the river valley (in the eastern portion of the park). The upland plateaus were generally forested with an oak-hickory mixture.⁹⁶ Kern mentions that the forest undergrowth had a "wild and pleasing native scenery of its own."⁹⁷ The slopes and valleys had richer soil that supported a variety of plant species. In particular, the river valley contained large specimens of elm, sycamore, maple and cottonwood. Appendix 2 is a list of the "Indigenous Trees and Shrubs Found in Forest Park in its Primitive State."



Illustration 1

From the beginning, Kern was aware that financial support for park improvements was limited. Any plan would have to be implemented gradually, as funds became available. As will become evident, this fact dramatically altered the history of the park. The original plan was never fully implemented; consequently, change became the norm for Forest Park. There was never a finished product that could be maintained and preserved according to prescribed guidelines. This is the fundamental difference between Forest Park and Central Park (as alluded to by August Hecksher in a previous quote). Forest Park had a conceptual model or framework that helped guide design decisions, but it never had a complete and whole physical design to serve as a detailed reference for future design decisions. Ultimately, lack of definition helped facilitate flexibility but constrained efforts to achieve unity and harmony in the park's design. If a comprehensive plan had been completely implemented at the beginning, it is possible the 1904 World's Fair would have never been sited in Forest Park. But this was not the case. Change and unstructured diversity have prevailed.

It would be misleading, however, to conclude that Forest Park has evolved contrary to its original intended purposes. While it is true that much of the physical design of the park today is not in keeping with the original plan by Kern, the conceptual model for the park

has been preserved. Insofar as change equates to variety, Kern's original concept is still relevant and viable. Kern states that he was guided by two general concepts in the design for Forest Park:

First, to create as great a variety of scenery as the grounds will admit of; and second to introduce a reasonable number of features of attraction, not only such as are calculated to amuse, but also those which will instruct and improve the public mind.⁹⁸

Of course, Olmsted parks also include "features of attraction," but there is a difference in conceptual emphasis. Kern's concept could be interpreted as precedence for design variety, where nonnatural design elements are more welcome and play a more vital role in the park's design. But this is only a slight difference, for indeed, Forest Park was, in most respects, true to its name; natural spaces and scenery were still the dominant design elements in the park.

In the following quote, Kern outlines the park's plan, stressing the appropriate location of the features of attraction and the different park uses relative to the existing park landscape:

The conformation of the ground suggests most forcibly the choice of locations most suitable to the pursuit of various enjoyments. The eastern portion of the Park, directly connected with all the lines of public conveyance, and

nearest to the city, will ever be the congregating and rambling grounds of the masses who frequent the Park on certain days and occasions. The valley grounds--a wide and open meadow--commanding a magnificent panoramic view of the Park, are most favorably adapted to the interests of a sociable and sportive drive. The shades of the forests will naturally attract the masses of the people on the occasions of festivals and picnics, and also offer more retired drives, especially during the hours of sunshine and oppressive heat.⁹⁹

As Kern describes in detail each passage of his design from "the rambling grounds" to "the driving grounds" and then "the upland forests and playgrounds," we begin to see more clearly the conceptual framework of the design. Referring to "the rambling grounds," Kern writes:

In reality, the front ground of the Park is intended to be improved and ornamented in the most elaborate manner. Its various pedestrian paths and promenades will lead the visitor to many places of attraction. The grand fountain and the Sylvan lake, surrounded by verdant laws, will be the leading features of this valley. The forest groves and lawns, in its centre, are set apart for Young America . . . A variety of rustic houses, covered seats and little temples should here be erected.¹⁰⁰

The "floral promenade" is also located in this area on a small ridge line. It consists of a "central carriage promenade" bordered by floral displays and pedestrian walks, ornamental accents such as statuary and vases, a canopied seating area and informal rose garden west of the central promenade, a tropical conservatory with an



Illustration 2

aquarium to the west, a temple for music at the northern terminus, and a museum building at the southern terminus of the promenade.¹⁰¹ Kern suggests the valley west of the promenade be used to keep "interesting foreign animals." He also refers to the rambling grounds as an arboretum, implying he would not limit the plant palette to only native species, and he would allow some ornamental plantings in formal beds. There is a sixty feet wide boulevard along King's Highway with a median to display statuary that serves as a front approach to the park.¹⁰²

The "driving grounds" located in the valley area include the Hippodrome (a fast race track for horses), a twenty-five acre lake, another temple for music at the lakeshore, a lake drive along the southern shore and the "Grand Concourse," (a formal terrace connecting the Hippodrome to the lake).¹⁰³ A restaurant is located on the Grand Concourse, from which one can view a cascade spilling into the lake. This concourse is the second major formal design element in the park. (Olmsted parks typically have only one formal space, usually a promenade.) The "Grand Drive" is connected to the Hippodrome and forms a loop road around the entire park. Answering the criticism that the forty foot width of the drive is too small, Kern argues:

First: the drive commands so great a variety of scenery, and touches upon features of

attraction, so far apart from each other, that it is not reasonable to presume that a majority of vehicles will move at the same time in one given direction, as is the case on the Gala Drives of other Parks, quite differently situated, where naturally greater space is needed. Second: in opening the lines through the forests, a great number of valuable trees has, of necessity, been sacrificed, admitting glaring sunshine, where, but recently, a pleasant shade was enjoyed. With a greater width of drives, this loss of shade would have been far more disastrous--. . .¹⁰⁴

Writing about the "upland forests and playgrounds" area Kern says, "by far the greatest space of the grounds, should in great part, be preserved in their present country-like simplicity, where every shaggy bush and spreading tree proclaims the seat of native liberty."¹⁰⁵ Included in this area are "large and commodious rustic structures" in the interior of the forests, a Deer Park (with domestic animals included) in the southwest forest, a "model dairy restaurant" (that would be popular, healthy and cost effective), and a "prospect tower or observatory" that would offer dramatic views sited atop the river bluffs. Kern suggests it be designed as a miniature castle, possibly appearing as a ruin.¹⁰⁶ The mention of an architectural incident such as this castle and the temples clearly connects Kern with designers such as Brown and Repton from the English Landscape Gardening School, but partially alienates him from the Olmsted tradition of

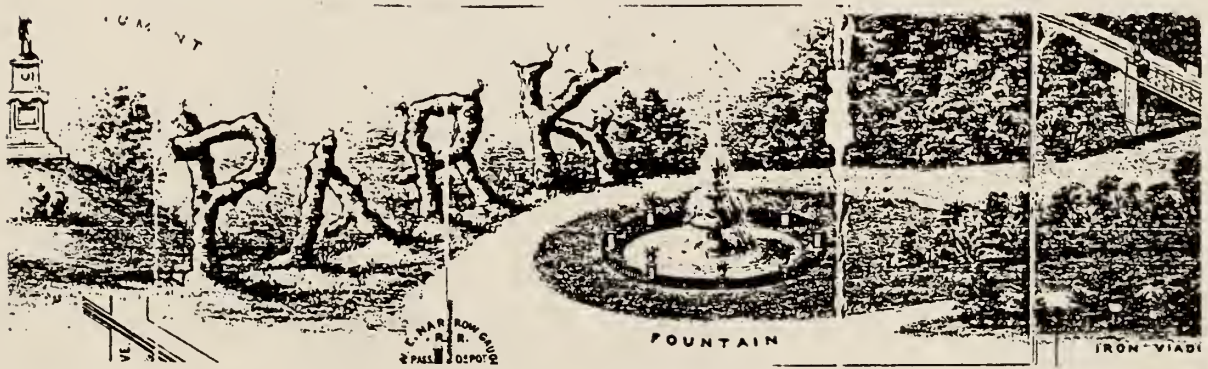
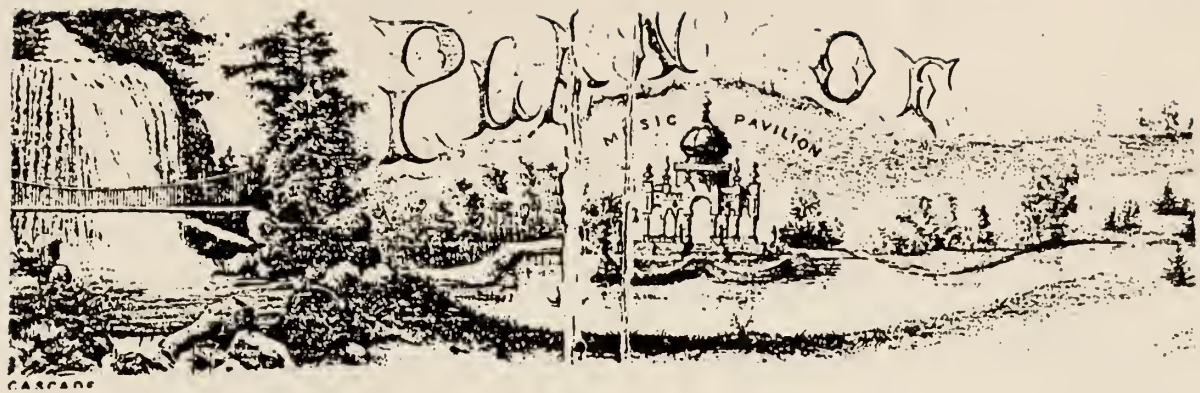


Illustration 3

disdain for scattered, small buildings and monuments that make a park resemble a cemetery.

But again, Kern parts with Olmsted only on minor points and in general it is obvious he takes many cues from Olmsted. In particular, he understands very clearly the delicate balance between unity and variety that was one of Olmsted's most critical concepts. He displays this understanding in two insightful passages:

To remove the marring tones, and to unite the really beautiful elements into one harmonious whole, is the task which the art of Landscape Gardening has to fulfill. Expression and character of scenery is conditioned by a proper balance of wood and lawn, of light and shade, of form and color. Without distinctness of outline and clearness of form, no scene of beauty can be formed. Pleasing variety is not attained by a capricious mixing up of objects, but by a judicious separation and union of the same.¹⁰⁷

But pleasing harmony, when visible everywhere, becomes splendid monotony in the end, unless relieved here and there by bold and striking contrasts. A gradual or even sudden change from the devious forest into a scene of pines and other evergreens will be admired by even the most thoughtless wanderer.¹⁰⁸

The design of Forest Park changed little from 1876 to 1885. Underbrush in the forested areas was cleared away and the wooden bridges had to be constantly repaired. The water system was expanded to provide drinking water to the

picnic areas. By 1879, Commissioner Eugene Weigel had created a fifteen acre nursery in the park.

From 1885 to 1901, Forest Park experienced a dramatic increase in the number of people visiting the park and the range of uses they required expanded correspondingly. In particular, active recreational pursuits dominated much park land. In the book entitled Forest Park, the authors state:

Spectators could cheer local teams playing cricket, lacrosse, football, and baseball on the park's broad lawns, or watch tournaments in tennis or what the Post-Dispatch called in 1894 the "new fad of golf." Horse fanciers could participate in the revival of harness racing. More active parkgoers could play at lawn tennis or croquet or drive burros or ponies.¹⁰⁹

In 1894, baseball fields were moved away from the lake to a new location near the police substation because lake users complained that the sporting events infringed on their solitude.

In 1892, the Lindell Pavilion was constructed at the north central entrance to the park, and a year later, the Laclede Pavilion was built at the northeast entrance. Both buildings were designed by the architectural firm of Eames and Young. Both structures were open and hugged the ground.

The many wooden bridges in the park were gradually replaced by more permanent designs. A bicycle path, a

bridle path and new pedestrian walkways were added during this period. A path one-half mile long was located along "picturesque Horseshoe Glen." A southwest drive at the Clayton/Skinker roads entrance provided a continuous improved road from the east end to the west end of the park. Another stretch of road was added south of the deer paddock.¹¹⁰

After receiving permission from the park commissioner, the St. Louis Amateur Athletic Association, or Triple A, occupied land near the Hippodrome, building a clubhouse, tennis courts, a baseball diamond and a nine-hole golf course. The Cricket Club, the Lacrosse Club and the YMCA also occupied grounds in the park.

By 1894, an extension to Peninsular Lake had been completed, providing expanded areas for skating and boating, both popular uses. One year later, the shore line was regraded to "conform to true curved lines."¹¹¹ The boat dock and related rental concessions were used beyond capacity. In one day in 1894 it was reported that at least 25,000 skaters utilized the park facilities.

The first greenhouse in Forest Park was built in 1892. New greenhouses were added in 1894 and in 1900. In 1897, all park department greenhouses were consolidated into Forest Park. The planting of new trees, the relocation of trees, and the removal of unsightly

vegetation has been an ongoing process in the park. In the 1895 Annual Report to the Commissioner it states:

Nine hundred and fifty shade trees of the following varieties were planted: Carolina Poplar, birch, maple, sycamore and weeping willow.

Three hundred and fifty evergreens of the following varieties were planted: Norway spruce, Colorado spruce, American arbor vitae, Irish juniper.

The large rose bed east of the old restaurant building was transferred to a more favorable location near grand central drive north of the music pavilion.¹¹²

By 1890, Forest Park contained a small zoological collection that included deer, geese, quail and prairie dogs. In 1891, a herd of Buffalo were added with an "ornamental yard and old style block house" to house them. Also by this time the Cottage Restaurant was being operated as a private business by Charles Schweickardt. He was required to construct a new building and to operate three "ornamental refreshment stands" for those park visitors who did not desire a full meal. A carousel, swings and band concerts were used by Schweickardt to enhance his operation.¹¹³ (This was the only real "playground" in the park at this time.)

The fate of Forest Park was sealed on June 25, 1901 when the LPEC directors announced they had selected Forest Park to be the site of the 1904 Louisiana Purchase



Illustration 4



Exposition. The World's Fair had a dramatic effect on the design of Forest Park. As mentioned earlier, seventeen thousand trees were felled to accommodate the exposition design. The park's forests were obliterated. The fair occupied nearly half the park land, 657 acres, leaving only 715 acres untouched. By locating the fair in the western half of the park the Exposition planners effectively eliminated the only truly wild natural areas in the park.

The World's Fair design was predominately an architectonic, formal design. Isaac Taylor's symbolic vision of an open fan demanded radial symmetry, broad vistas and extensive ornamental sculpture.¹¹⁴ The designer explains his scheme:

The topography led naturally to the use of the lower plain on the north as the site of a comparatively compact city of Exposition palaces, tied together by great formal avenues and crowned on the contiguous hills by the beautiful structures overlooking the lower levels; the slopes between being so shaped as to give the opportunity for the cascades and their surrounding gardens.

The disposition of the villa-like state buildings on the higher levels of the forest area to the south gave to each building a fine setting; the forest serving as a splendid background for the whole and the entire picture suggesting the possibility at least of a beautiful city in reality.

An entirely formal treatment of the level area or "main picture" containing the exhibit palaces, necessarily resulted in the arrangement of these buildings on rigid avenue

lines which were in turn subdivided into paved roads, broad lawns and water surfaces.

. . . Between the absolutely formal design of the main picture and the state buildings lay the pleasure grounds of the Exposition--the area of the Cascade Gardens, partly formal and partly natural in the execution of plantations and the formation of the ground.¹¹⁵

"Avenue lines" of maples softened the hard edges of the design. Colorful flower displays were like carefully placed jewels. Twelve hundred sculptures were sited throughout the design, many of an historical nature. George Kessler collaborated on the project as the chief Landscape Architect. Henry C. Pratt writes:

A word of praise should here be said of the sensible, conservative policy of Mr. Kessler in designing his landscape features. The treatment in the Cascade Gardens, for instance, is dignified. There is no resort to freakish designs for effects. Flowers of all colors are massed so as to produce certain desired shades and effects. The center of each garden is a broad expanse of lawn, smooth as a carpet. The floral treatment is all on the outer edges.¹¹⁶

Kessler describes how he attempted to compliment the architecture:

About the base of this building (Festival Hall) itself, I put in very heavy masses of shrubs, in order to tie the building to the ground surface, and because of the rigid architectural lines, I also introduced masses of color along the lines of the Colonnades and Festival Hall, using for the forms the garland effect, which Mr. Masquary

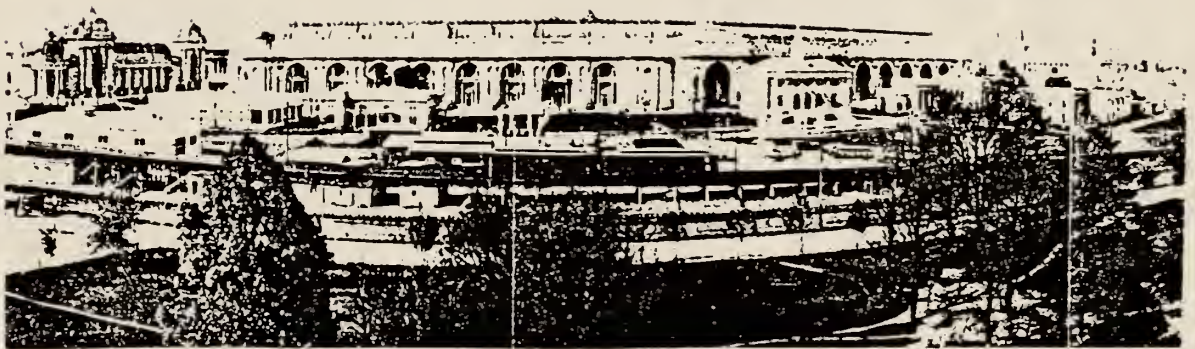


Illustration 5

had introduced into the Colonnades, making a direct connection between the lines of the architecture and the lines of the landscape, tying the two together.¹¹⁷

Kessler was assigned the extremely difficult task of reshaping the park after the Exposition. The park now required not only a dramatic physical reshaping, but a whole new conceptual framework as well; one that was sensitive to natural scenery, while still recalling the memory of the historic World's Fair. In the following quote from Kessler we see him clearly ally himself with Olmsted with his concept for the restoration:

The great concentration of population in large cities and its consequent removal from the natural scenery of the country which every human being craves, compels the reservation of large park areas for rest and recreation, in contrast with the harsh surroundings within a densely populated city. Therefore the careful preservation of natural scenery in the large parks and constant guard against permanent encroachment of any structures, except those essential to public comfort, should be the guide in everything connected with Forest Park, its restoration and preservation.¹¹⁸

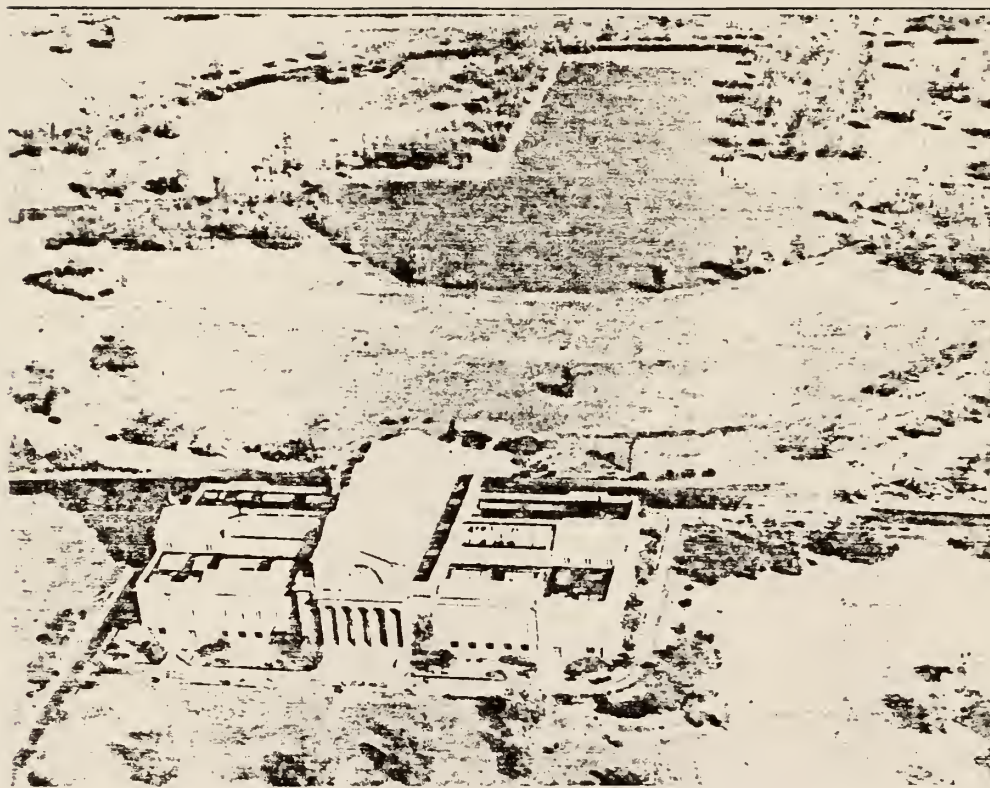
Trees planted for the World's Fair were generally retained in the restoration design, only being removed "to relieve a too apparent alignment which would not harmonize with the informal character of the new plan."¹¹⁹ Regraded areas such as the lower plain were shaped to create "a gently rolling surface." Five rustic wood bridges were

built. New vegetation was arranged so as to create long, captivating vistas both into and out toward the park, providing controlled views of key features such as the new Art Museum building sited atop Art Hill. The view of the River des Peres (a constant nuisance and eyesore) and the Transit Company's loop were screened by new plantings.

A series of lagoons and lakes were formed to create "an interesting and diversified treatment of the whole," "modifying the regular lines produced by the formal character of the Exposition plan."¹²⁰ The formal shape of the Grand Basin was retained. Along the banks of the lagoons new plantings of smaller trees and shrubs were used to create a "dense thicket" effect. Loughlin and Anderson on the restoration plan:

Actually, the park land was not restored but reshaped. Large open spaces and new buildings replaced the "magnificent forest" that had covered much of the western section of the park before the fair. Around the fair's Grand Basin, a new formal center emerged, with its axis from Art Hill to the Jefferson Memorial, built after the fair. The cleared slope of Art Hill revealed a new vista, and became a winter toboggan run and an amphitheater that accommodated thousands of people for civic celebrations after the fair.¹²¹

From 1911 to 1930 Park Commissioner Dwight F. Davis had a profound influence on the evolution of Forest Park. Davis preached the philosophy, "If we can't have the grass and the people in our parks, let's sacrifice the



Airplane View of Forest Park Showing the Art Museum

Illustration 6

grass."¹²² Expanded park activities and new single-function active recreational facilities were the order of the day. Davis did not develop a comprehensive plan for the park. In an ironic twist, Davis supported his policies with progressive rhetoric about the importance of promoting health and building character, the same goals articulated by Olmsted in reference to passive recreation.¹²³

An increasing city population coupled with the convenience of automobile access lead to dramatic increases in the number of park users. Conflicts arose as more and more users demanded access to the single-function facilities. Park spaces were no longer flexible. In the past, the same space could serve several different functions: baseball, tennis and passive activities such as picnicking could all occur on the same grass lawn.¹²⁴ Only the cricket lawn was still flexible. Active recreational pursuits were now organized on a fixed schedule and facilities were permanent. Not only were these activities incompatible with the park's original concept of escape from the city, the facilities they required impacted negatively on the intended naturalistic character of the park.

In some cases landscape design concepts such as screening views and the clustering of similar activities were not utilized to their full potential. The rule of

keeping potentially conflicting uses on the edges of the park away from the park core was usually followed, but not always. To their credit, park planners and designers did address the problem. The 1911 Annual Report of the Park Department states: "The greater portion of the southwest quarter of the park should permanently be held in wild forest condition, preserving at least this much of that feature which will justify the name."¹²⁵

One of Davis' first actions after taking office was to meet with representatives of private golf clubs in the city to plan a public golf course for Forest Park. He did not solicit the expertise of a design professional.¹²⁶ The group of local golfers planned a nine hole course around the core area that opened for play in July, 1912. The course was quickly expanded to eighteen holes; then a new nine hole course was added that included suspension foot bridges across parts of the lagoon.

Immediately these golf courses strained the park's design concept. Several holes have greens that are elevated in an unnatural way, not conforming to the existing topography. One green is sited not more than ten feet from the formal edge of the Grand Basin; the hole actually plays across the Basin. Another hole is laid out across Art Hill so that golfers hit balls directly through an area that, as an open lawn, would afford great possibilities for passive recreation.

The Davis era saw numerous other changes implemented. In 1912, thirty-two tennis courts were added to the park. The bridle path was resurfaced and lengthened to create a loop. By 1929, the park had twenty baseball diamonds squeezed into "every available space."¹²⁷ Although one major grouping of baseball fields was properly located along the park's southeastern edge, another major grouping was sited in an east/central location that clearly infringes upon the park's natural areas. A clustering of athletic facilities including tennis courts and handball courts arose too near the Core Area in the north/central vicinity. Other additions included two soccer fields, a croquet course and an archery range. The archery range and possibly the handball courts are inappropriate uses for a large central park.

In 1914 the Lindell Streetcar Pavilion was adapted for a new use; lockers, showers, a refreshment stand and a pro shop were added. The open-air municipal theater was constructed in 1917. The zoo was expanded into a major attraction in the 1920s, despite Davis' plea to acquire land elsewhere in the city for the zoo.¹²⁸ Gradually commercialism invaded the park, something Olmsted warned against. Commercialism reflects the values of a competitive urban society, values Olmsted wanted to escape in his naturalistic parks.

Despite the fact that Davis did not have a comprehensive master plan for the park, he did instigate a landscaping plan with the help of Kessler to avoid the haphazard and disparate planting procedures followed to date. The plan attempted to coordinate the floral treatments into one comprehensive and tightly unified scheme, leaving the rest of the park for athletic fields, lawns and forest.¹²⁹

Government Hill became the focus of this plan. Formal flower displays wrapped around parallel stairways that climbed the hill. Unfortunately, this formal design was not suitable to function as a formal promenade because of the drastic slope. Forest Park has since suffered the lack of a promenade, a key design element in an Olmsted park. Later in 1930, Government Hill was adorned with a new fountain that successfully combined a formal context and a naturalistic form.

The varying shapes of the sprayed water and the gradually changing shades of light on the water, from green through blue to red, brought 'audible sighs of satisfaction and exclamations' from spectators standing on the hill or seated in their automobiles.¹³⁰

The park's original road system was often confusing to drivers because of its many curvilinear routes. Safety considerations led to the elimination of one very tight curve known as Dead Man's Curve. In 1915, Government



Illustration 7

Drive was widened to create a diagonal route through the park. Park land was used to widen Skinker Road the same year. The South Forest Park Resident's Association failed in its attempt to have a north-south road added to the park.

Forest Park was home for several unusual facilities during this period. A landing field for airmail was located near the mounted police station, a Red Cross vacation village operated near the park's southern border, and an automobile tourist camp was also sited near the southern edge. Two proposed uses that were eventually rejected caused St. Louisans to reflect on the changes in the park's design that now threatened its integrity. A 1918 proposal to mine fire clay in the Park and repeated attempts to locate a 50,000 seat stadium there were symbolic of the extreme pressures put on the park's design.¹³¹ An article in the St. Louis Post-Dispatch stated that approximately forty percent of the park's land was occupied by special uses.¹³² If Forest Park was no longer an oasis of natural beauty in the teeming city it was probably due to the fact that years Dwight Davis saw no need to develop a comprehensive master plan for the park.

The city of St. Louis faced severe traffic problems in the 1930s, forcing planners to widen Kingshighway. As usual, park land was much easier and cheaper to obtain

than private property; thus a strip of land along Forest Park's southern edge was used for the new highway. Because of this change several greenhouses, part of the bridle path and the Edward Bates Statue had to be relocated. The park's southeast entrance was virtually eliminated.¹³³

The 1936-37 "Report of the Landscape Architect" notes that the Jewel Box grounds were improved with the planting of large elms, pin oaks and evergreens as a background for the rose garden. Also reported were the replacement of a baseball field by Barnes Hospital (that bothered patients) with a rose garden, the construction of a quarter-mile bicycle track in the park's southeast corner, and the adaptation of the aviation field by Oakland Avenue into nine baseball fields, two football fields and one soccer field.¹³⁴ In the 1937-38 report the following year, the construction of two appropriately designed features was noted: a naturalistic waterfall next to Lagoon Drive and a refreshment stand on Summit Drive made of native stone.¹³⁵

Forest Park remained basically intact until 1957 when a skating rink was constructed near Kingshighway at the park's eastern border. In 1963, the McDonnell planetarium was built on top of a hill overlooking Jefferson Lake. Designed in a strikingly contemporary style, the planetarium building is a perfect example of

noncontextual design. The building looks like a space craft or flying saucer of some kind. Not only is the design of the structure blatantly inappropriate, it is sited boldly on a ridge, viewable from several areas of the park. This symbol of technology looms over the naturalistic environment around Jefferson Lake. Even though the planetarium is located near one edge of the park, the specific aspects of its site design eliminate this advantage. The planetarium at different times has attracted companion landscape elements such as an eighty-seven foot tall Thor rocket and two enormous replicas of dinosaurs.

The negative impacts of roadways continued to plague Forest Park. The intersection of Kingshighway and Lindell was enlarged in 1958, requiring the relocation of an historic gaslight that had become somewhat of a symbol for that area of the park.¹³⁶ The center strip of Kingshighway was paved, eliminating an effective transition device. About six acres of park land were taken by the Forest Park Expressway in 1959. State highway planners claimed a huge chunk of park land (44 acres) when the Red Feather Highway was widened and connected to U.S. Highway 40. A Kingshighway cloverleaf cut off the children's playground and the rose garden from the rest of the park. Tennis courts, the bicycle track, several greenhouses and the head gardener's cottage were

PARK LOCATOR MAP (1945-1976)

- 1 Archery range, B-11
- 2 Arena parking lot (proposed), B-8
- 3 Art Hill, E-4
- 4 Art Museum, St. Louis (formerly City Art Museum), expansion, D-4
- 5 Athletic fields: Aviation Field, B-9 to 11; central fields, D-11 to E-10; Langenberg Field, F-6 and 7
- 6 Barbecuing clubhouse and docks, E-6
- 7 Bates, Edward, statue, F-3
- 8 Bicycle path (formerly bridle path), C-3 and throughout park
- 9 Bicycle track (removed), A-13 and B-14
- 10 Bird sanctuary, B-2 to D-3
- 11 Bowl Lake, B-13
- 12 Cascades waterfall, F-2
- 13 Children's playgrounds, A-5, A-14, C-13
- 14 Cricket field, F-8
- 15 Field house, G-7
- 16 Fire and Police Alarm Center, A-13
- 17 Fish hatcheries (including parts of former Sylvan Lake; the hatcheries are now closed), F-11 to G-10
- Forest Park centennial marker (see 7, F-3)
- 18 Forest Park Expressway, F-13 to H-1
- 19 Forest Park Parking Center, underground (Barnes Hospital Parking Garage), C-13
- 20 Fountain (near Municipal Theatre), F-8
- 21 Fountain, Triangular, G-13
- Frank, Nathan, Bandstand (see 46, F-8)
- 22 Frankenthal Memorial Drinking Fountain (removed), D-7
- 23 Golf courses: Eisenhower Municipal, 18-hole, D-1 to G-6, 9-hole municipal, G-2 to G-6, Triple A, 9-hole, C-9 to D-11
- 24 Golf course driving range, G-8
- 25 Government Hill and illuminated fountain, D-6 and 7
- 26 Grand Basin, E-4 and F-5
- 27 Greenhouses (relocated), B-9
- 28 Guggenheim, Bertha, Memorial (Pan) Fountain (removed), F-8
- 29 Handball courts, G-7
- Hudlin, Richard, Memorial Tennis Courts (see 57, C-14)
- 30 Incinerator, B-8
- 31 Jahn, Friedrich Ludwig, Memorial, D-5
- 32 Jefferson Memorial building and expansion, G-6
- Jefferson, Thomas, statue (see 32, G-6)
- 33 Jewel Box Gardens, C-9
- Colonial Daughters Fountain
- Floral Clock
- Lamppost (moved from Lindell-Kingshighway intersection)
- Lander Drinking Fountain
- Rose gardens
- St. Francis of Assisi, statue
- Shields, Mary Leighton, Sundial (second location)
- Vandeventer Place gates
- 34 Jewish First American Settlement Commemorative Monument and Flagpole, G-13
- 35 *Joie de Vivre*, E-12
- 36 Junior College District administration building (approximate proposed location), A-1
- 37 Kennedy, John F., Memorial Forest, A-1 to C-2
- 38 Lake Louise, F-12
- 39 Low-rent housing (approximate proposed location), B-14
- 40 McDonnell Planetarium (later part of St. Louis Science Center), B-12
- 41 Mounted Police stable (formerly hangar), B-11
- 42 Municipal Opera Drive (formerly Theatre Drive), F-8 to F-10
- 43 Municipal Theatre, E-8 and 9
- 44 Native American (Indian head) statue, B-7
- 45 O'Neil Fountain (Fountain Angel, removed), F-8
- 46 Pagoda Lake, F-8
- 47 Park keeper's house, G-10
- 48 Parking lots: art museum, D-4; field house, F-7 and 8; municipal theatre, D, E, and F-9; Steinberg skating rink, E-12; McDonnell Planetarium, B-12; zoo, B-5, C-4
- 49 Parks, Recreation and Forestry, Department of, office building, B-9
- 50 Picnic grounds (expansion), B-2
- 51 Post-Dispatch Lake, D-6 and 7
- 52 *St. Louis, Apotheosis of*, statue, E-4
- 53 St. Louis Award (White Pine Statue), D-6
- 54 St. Louis Children's Hospital expansion (proposed), D-13
- 55 Steinberg, Mark C., Memorial Skating Rink (approximate proposed location), E-13
- 56 Steinberg, Mark C., Memorial Skating Rink, E-12
- 57 Tennis Courts: Davis Tennis Tournament Center, F-7; Hudlin Memorial, C-14, Triple A, D-11 and 12
- 58 Triple A Clubhouse (second location, third building), C-11
- 59 U.S. Highway 40 (Daniel Boone Expressway), A-1 to C-14
- Veterans' hospital (proposed; see 39, B-14)
- 60 Wabash Bridge, G-11

Zoo (St. Louis Zoological Park)

- 61 Aquatic House, C-4
- 62 Big Cat Country, B-6
- 63 Cheetah Survival Center, B-4
- 64 Children's Zoo, C-5
- 65 Elephant House (second location), B-3
- 66 Kiener Gate, D-6

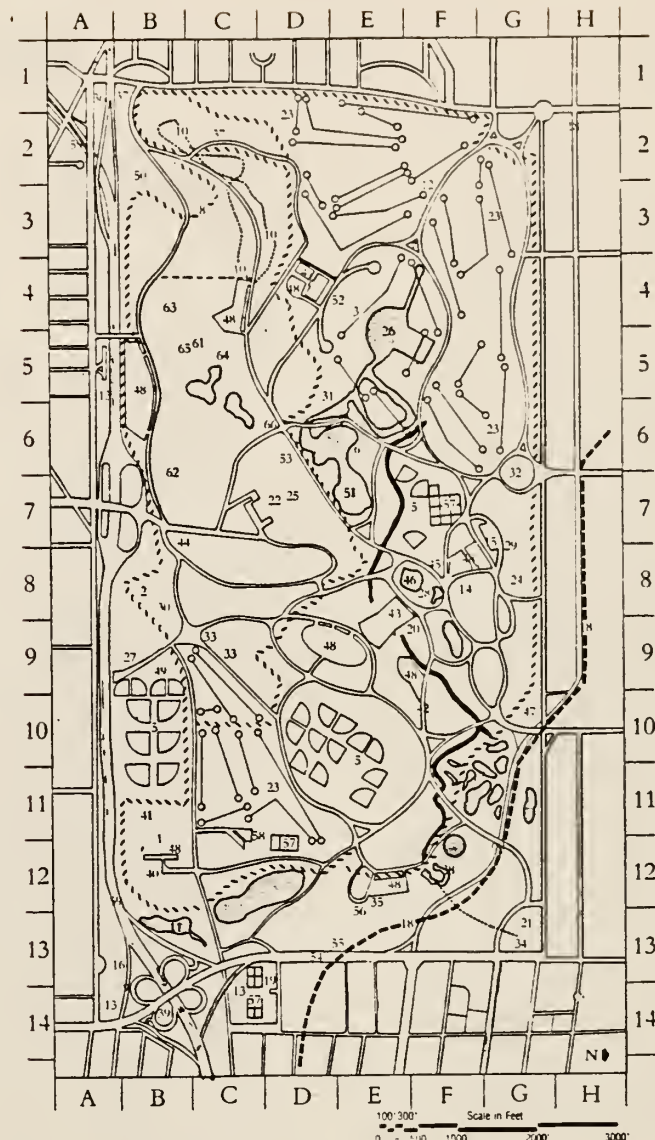


Illustration 8

also casualties of this massive encroachment.¹³⁷ Major multilane streets choked Forest Park on all sides, discouraging access by pedestrians and bicyclists.

The lack of a park master plan crippled efforts to control park design changes in the 1960s and 1970s. Change management efforts were aided, ironically, by a lack of funding for Forest Park.

As long as funds were available, the city could add facilities without having to make difficult decisions about priorities. Each proposed project seemed important enough to merit room. The zoo, the museums, the playing fields, the plantings, the administrative buildings, the roads and parking lots, the surrounding neighborhood--all grew until they began to collide. The park sometimes seemed a collection of different institutions, each with its own users, funds, priorities, and board of control.¹³⁸

In response to the obvious need, a master plan was finally commissioned in 1976. The completed plan was highly controversial and in many ways failed to articulate a vision for the park that captured the imaginations of St. Louisans. In particular, critics claimed the plan's proposal to eliminate many roadways ran counter to the park's legacy. Parking lots proposed as alternatives to on-street parking would be inconvenient and obtrusive, argued some. Golfers pointed out that the golf holes to be removed under the plan were the most challenging holes of the park's course. A loop road, another of the plan's

proposals, would encourage more traffic in the park. Finally, those opposing the plan noted that by designating "improvement areas" for selected new uses (even with strict guidelines), the plan opened the door for additions to the park when removing uses should be the goal.¹³⁹ As of now, Forest Park still yearns for a master plan that synthesizes design concepts into a new vision for the future.

VII. Current Conditions in Forest Park: A Photo Essay



Illustration 9



Illustration 10



Illustration 11



Illustration 12



Illustration 13



Illustration 14



Illustration 15



Illustration 16



Illustration 17



Illustration 18



Illustration 19



Illustration 20



Illustration 21



Illustration 22



Illustration 23



Illustration 24

To appreciate the past is to transform it.
Every trace of the past is a testament not only
to its initiators but to its inheritors, not
only to the spirit of the past, but to the
perspectives of the present.

David Lowenthal
(from "Age and
Artifact")

VIII. Conclusions: Lessons From Forest Park and Design
Recommendations

The history of Forest Park presents a wide range of design changes to evaluate; some successful, others flawed, and many that draw mixed reviews. Within this grey area it becomes difficult to arrive at conclusions about the relative effectiveness of different design decisions. However, an attempt will be made to sort through this mixed bag, drawing conclusions whenever possible. In this process, subjective evaluation is accepted as a necessary component of an analysis, such as the one presented here, that focuses on inherently ambiguous concepts such as beauty, historic or conceptual integrity and social values.

Despite the subjective nature of this topic, it is possible to develop a research structure or set of precepts to guide analysis. As outlined earlier, this thesis will attempt to discern if layering is a significant problem in Forest Park. Design changes will be evaluated by asking two questions: does the change either create or reduce a layering problem; and is the change compatible with the design concepts of the original designer.

It should be noted that a design context, especially a landscape context, is always in a state of flux. Design changes are woven into the existing design fabric, creating a subtly altered context. Subsequent changes are evaluated with respect to the new context. This does not mean that all changes are accepted as valid simply because they exist. A design context is not always worthy of respect. The original design concepts as well as comparisons to parks with similar concepts should serve as a barometer, providing standards for analysis. The important point is that a landscape design can never be restored to match precisely its original physical form. The primary goal is to recreate or maintain a conceptual framework for the park. Specific design recommendations develop from a synthesis of conceptual goals and the practical realities of physical design problems. The essential goal being to create a park that is well

designed, with a proper balance of unity and variety. As noted earlier, deliberate preservation can itself create layering.

Kern's plan for Forest Park was never implemented as a complete and coherent package. Although the plan did articulate a conceptual framework, it was too general to serve as a guide for specific design decisions. The two main concepts that drive the design are susceptible to misinterpretation or distortion. Kern wanted to create "a variety of scenery" and "a reasonable number of features of attraction." These rather vague phrases could be used as justification for all manner of design changes or additions. Kern failed to present adequate elaboration of these concepts.

A close examination of the site plan shows that in many respects Kern's design is in keeping with the essential Olmsted legacy concepts. The formal elements are clustered in the eastern half of the park around a promenade; the remaining areas are left natural. Profuse plantings, spatial extension, natural spaces, structures integrated into the landscape and design for overall unity are Olmsted concepts that are all present in Kern's plan. He does depart with Olmsted on several key points, however, and it is precisely these points that have produced ambiguity and tension as Forest Park's design has evolved. Kern's plan does not have separation of the

circulation systems, separation of activities, or a designated area for active recreation. For example, the Hippodrome (a fast track for horses) is sited close to a lake and a large meadow that are intended to be used for passive recreation. In a case such as Forest Park, where certain design elements are partially flawed, it is best to refer to a prototype that seems to match the designer's intentions, such as Central Park by Olmsted. In this way, design adaptations can be influenced not only by the original plan but by similar, "ideal" plans as well.

The 1904 World's Fair was the first highlight in Forest Park's history of changes. Although it is hard to argue the Fair should have been located elsewhere in the city, it seems clear the design for the Fair had a negative impact on Forest Park. The fairgrounds should have been located in the eastern half of the park. The western half contained valuable forested areas that served to balance the overall design; a balance of mass and void, dark and light. The park never completely recovered this balance after the Fair. There is another reason the Fair should have been located in the eastern half of the park. The Fair's design was necessarily formal in character and Kern's original design called for a formal promenade to be sited near the eastern edge of the park. The promenade had not been built yet. A formal design, even of a

different shape than the proposed promenade, would satisfy this aspect of the park's conceptual framework. Thus after the Fair had ended, its formal design could have been adapted to be a space for "gregarious" receptive activities.

Given the western location of the Fair, the post-Fair restoration should have been based on a similar concept. That is to say, a more strongly defined formal space, including the equivalent of a promenade, should have been created around the Grand Basin. Kessler's restoration plan retained only the formal shape of the Basin. The lagoon area between the Grand Basin and Post-Dispatch Lake has oddly shaped waterways that appear half natural and half formal, creating a layering of styles. A better solution would have some strongly formal lines and some obviously organic lagoon areas, thus unifying the design through the use of strong contrasts and avoiding a weak, fragmented compromise. The Art Museum building is a complicating factor; it adds a layer of neoclassical grandeur to the composition. Extensive foundation plantings would tie the building to its context more effectively.

One positive result of the World's Fair restoration was the development of Art Hill as a large gathering space for civic events. The park finally had Kern's "congregating and rambling grounds," albeit in a different

location than planned. What became known as the Core Area was now the formal center of the park where new attractions such as the zoo, the Jefferson Memorial and Government Hill would converge. Unfortunately, this meant that several elements that ideally would be on the periphery of the park were in its core. As a gesture towards balance, the eastern half of the park was shaped into a naturalistic space focused around Jefferson Lake. This conceptual shifting is proof of the mercurial nature of a landscape context.

The next critical phase in the evolution of Forest Park was the rise of single-function, active recreation facilities in the period 1911 to 1930. Park Commissioner Dwight F. Davis effected numerous changes in the park's design without an overall master plan (or new "meaning system") to guide his decisions. The result was a capricious mixture of special uses that encroached upon the park's natural areas. Precedent for the inclusion of permanent recreation facilities came earlier when Triple A, a private club, was allowed to build a nine hole golf course, a clubhouse, tennis courts and a baseball diamond in the park. Olmsted believed no park features should be privately controlled.

Soon an eighteen hole golf course and another nine hole course blanketed the Core Area. Local golfers planned the courses without the assistance of a design

professional, and the results are predictable. Several golf holes encroach severely on the Grand Basin and Art Hill, eliminating the possibility of using these areas for passive recreation. Grading and planting design are not used effectively as a means of controlling the negative impacts. However, the lower plain area is suitable for use as a golf course because it is near the north border, and it creates the opportunity for a dramatic vista from Art Hill looking north across the gentle undulations of turf. (The Triple A course is also situated so that it functions as an open meadow.)

A clustering of tennis courts and handball courts were located in the north/central area of the park too far south and too close to the Core Area. Again, grading and planting design techniques were not effectively utilized to screen these uses. Several baseball diamonds were sited in an east/central location that is too far into the heart of the park. However, low backstops and no lights or stands help this area approximate a naturalistic space. (Later, a ball field with lights and stands was appropriately sited near the park's southern edge, but without the benefit of a vegetational buffer around it.)

Government Hill and the Jewel Box have satisfied one purpose Kern's proposed formal area was intended to serve, that of displaying formal floral treatments; but they are not unified into a single formal statement as Davis had

planned. The Government Hill fountain and the Lagoon Drive cascade are designed in an appropriate naturalistic style that blends well with the landscape. (Kern included a cascade in his original plan.) A naturalistic element can be isolated; it does not necessarily require linkages with other elements. Formal elements however, such as the Jewel Box, must be either consolidated with other formal elements or heavily screened to prevent layering. Neither Government Hill nor the Jewel Box have any of these conditions, thus they are examples of layering.

The zoo, by virtue of its perimeter location, the municipal theater, because it is screened and integrated into the landscape, and the skating rink, for both of these reasons, are appropriate and compatible designs. The skating rink building, several bridges and a number of small maintenance buildings blend effectively into their surroundings because they are constructed out of native stone. In contrast, the planetarium fails on all counts. It proudly displays its layer of noncontextual contemporary styling atop a hill overlooking Jefferson Lake. Indeed, layering is a significant problem in certain parts of Forest Park.

The following are design recommendations for Forest Park based on the principles discussed in this chapter:

- (1) The existing curvilinear roadways should be preserved intact with only a few changes. These drives are a

part of the landscape heritage of Forest Park. Straightened roads bring excess cross traffic through the park. The park's road system, thought by many to be overly complex and baffling, actually helps regulate the spread of traffic through the park; people are inclined to avoid driving through the park unless actually visiting a specific feature in the park. However, speeding still occurs in the park. Strategically placed speed bumps should be used as a deterrent. Historic bridges should be repaired and restored when necessary.

- (2) A much thicker vegetation screen or buffer (using evergreens) should be wrapped around the club house buildings located by the 9-hole executive golf course in the southeast quadrant of the park.
- (3) The golf courses should be preserved in as natural a state as possible (in the Scottish tradition); the golf course design blending subtly into the rolling hills of the park. To this same end, the number of sand traps should be limited, and when used, they should be concealed by grading design. Greens also should fold naturally into the existing topography, tightly tucked into the landscape. Fences should be used only when absolutely necessary, and then only open designs.

- (4) Damaged vegetation should be replaced by the same or a similar species of plant, following the original design concepts with regard to design effect.
- (5) All on-street parallel parking spaces should be removed and new clusters of parking lots should be designed to control or compartmentalize the negative impact of automobiles and to provide convenient access to the major attractions of the park. Parking lots should be heavily buffered from open areas and heavily planted to soften the negative visual impact of broad expanses of concrete.
- (6) The Government Hill, semi-formal plaza should be repaired and restored; some plants removed, others added, to more closely represent the original landscape design. The exposition building could be adapted to be a publicly managed refreshment center and cafe.
- (7) A much more extensive system of jogging and bicycle trails should be laid out. Pathways should, whenever possible, be routed through naturalistic areas to create a continuous experience of pastoral scenery. Existing dirt, asphalt and concrete pathways (except bicycle paths) should be reconstructed and made of an all weather crushed rock material that is permanent, requires low maintenance, drains well, and is more naturalistic in appearance.

Temporary foot bridges should be replaced with more permanent structures.

- (8) The planetarium building, because of its inappropriate design style, should be screened using evergreens so that it is obscured from view across Jefferson Lake in the natural area just east of the 9-hole golf course. Bold signage will provide adequate orientation for planetarium users.
- (9) The gardens around the Jewel Box greenhouse should be repaired and restored. Views into the gardens should be screened and controlled. All lighting and landscape furniture should be replaced to create a consistent style that is in harmony with the historic context. New formal flower beds will adorn the Jewel Box, playing to architectural advantage. The roadways around the building should be slightly revised and replanted to enhance the landscape setting, creating vegetation buffers. Pedestrian pathways around the building should be rerouted, made curvilinear and repaved.
- (10) The handball courts in the north/central area should be screened from the roadways and the core area to reduce the negative visual impact of vertical concrete walls. In general, more vegetation is needed around all the elements in this recreation cluster. Better signage is also needed here.

- (11) Thick vegetation should be planted on the periphery of the park, especially along Kings Highway, to more effectively insulate the park from the surrounding presence of the city. Buffers should also be placed around existing parking areas and other unsightly areas such as maintenance buildings.
- (12) The archery targets by the Planetarium are unsafe, unaesthetic, and should be removed from the park. This is an inappropriate use.
- (13) Landscape architectural designs such as entrance gates, bridges, roads, retaining walls, fountains, steps and paving patterns should be repaired and restored to match their original conditions as closely as possible. (Important changes in a design can with time become a part of the landscape fabric, thus altering the design context. In this case, the altered design should take precedence as a guiding conceptual influence.)
- (14) The edge around Jefferson Lake should be restored to its original naturalistic appearance using stone, not concrete, and a new dock should be constructed out of stone.
- (15) A new nature center could be added to the design program. Such a center would promote the educational aspects of natural scenery, clarifying the purpose of

the park while adding a new and compatible attraction.

- (16) Entrance points into the park should be more strongly defined using colorful plantings, sculpture, water features and bold signage.
- (17) The baseball diamonds located in the east/central area of the park (next to the 9-hole golf courses) should be removed. A new carpet of grass will help create a grand lawn for passive recreational activities.
- (18) The Parks, Recreation and Forestry office building should be partially screened with a vegetation "baffle" effect.
- (19) Foundation plantings should be used to anchor the Mounted Police Stable or Hangar Building, tying it more closely with its naturalistic context. Ideally, this structure would be removed.
- (20) The lighted baseball diamond with stands should be heavily screened from the road using an evergreen buffer.
- (21) Temporary design elements, such as the carousel that has appeared by the zoo, should be carefully monitored and controlled to avoid excessive impact on the predominately naturalistic character of the park.
- (22) Sculptures, fountains and memorials should only be added when, in the opinion of a design professional,

they have artistic merit. They should be sited in a sensitive way, blending into the existing naturalistic landscape without interrupting sight lines or disturbing the linkages and relationships between spaces and design elements.

- (23) No new uses or major design features should be added to the park except for the proposed nature center and the Core Area improvements described in the next chapter.

The concept of the proposed site design for the Core Area is based on the premise that this area is, in its current condition, generally disparate, fragmented, poorly defined, conflicting, and partially out of touch with its conceptual heritage. The encroachment of the golf course is a key issue. Currently, eight of the golf holes conflict directly with pedestrians wishing to use the Grand Basin area for passive recreation.

Roadways represent another major encroachment. Two roads currently bisect and skirt the Core Area, bringing the noise, exhaust and glare of automobiles close to areas that should be reserved for pedestrians. Parallel parking along the roads creates a negative visual impact. The turn-around areas that follow the rim of Art Hill also encroach upon the pedestrian environment.

The lake and lagoon waterways are confounded, forming odd shapes and making awkward connections; and they are too small for boating and ice skating. The Core Area is also in need of extensive repairs to architectural details, lighting, street furniture and the Basin edge. Plant materials and turf must be replaced in several spots. Regrading is necessary in the lower valley area between the Basin and the lake to achieve better drainage.

Besides these problems with the existing design fabric the Core Area also suffers from a lack of conceptual identity and a dearth of appropriate "attractions." The formal edge of the Grand Basin is not a strong enough connection to the legacy of the World's Fair to communicate its intentions clearly, but it is a strong enough stylistic element to impact the character of the design. The result is a space that begs a stronger formal statement to complete the Basin's Beaux Arts motif and solidify its heritage. A lack of viable landscape attractions and the presence of the golf course inhibit the Core Area from being used extensively by park visitors. Aside from the Art Museum there are no magnets to draw people into the space. There is also a lack of pedestrian pathways. Given the absence of a formal promenade elsewhere in the park, the Core Area should become the major space used for receptive recreation. The following is a list of the major design adaptations

proposed in the site plan for the Core Area (refer to map in back pocket):

- (1) A total of nine golf holes that encroach upon the Core Area have been removed according to this plan. Elevated greens are to be leveled and sandtraps filled in. In order to create a pedestrian environment two parts of roads have been removed, including the road that bisects the lagoon and Post Dispatch Lake and the road that runs past the north edge of the Grand Basin. Automobile access in front of the Art Museum building is also curtailed, with drop-offs on either side of the building replacing the existing road. All parallel parking along roads has been eliminated because long lines of cars spread out a negative impact. In order to contain and buffer this negative impact, two new parking lots are located on either side of the Art Museum building. These lots are curvilinear in form and planted heavily to blend with their surroundings. Another parking lot is located at the northern edge of the Core Area adjacent to the proposed Water Garden. Together these three lots substantially increase the total number of parking spaces, thus allowing for the addition of several new attractions.

- (2) A series of formal pedestrian promenades traverse the upper lip of the bowl shaped Art Hill, linking three plaza nodes that pay homage to similar elements in the 1904 World's Fair design. The central node is placed further away from the Basin than it was in the World's Fair scheme in order to preserve Art Hill as an open meadow and a toboggan run. (This is an example of how concepts can reflect the evolving context of a design, where changes in an earlier design become viable contextual elements. In this case the "earlier design," the World's Fair design, is itself a change from the original design. However, a link with the original design is maintained because a formal promenade was included in Kern's original plan, although it was never built. The intended location of the original promenade, near Jefferson Lake, is no longer a desirable location for such a feature because it would encroach upon one of the few remaining naturalistic open spaces.) The siting of the two side plaza nodes corresponds with the locations of the two existing automobile turn-arounds. Formal walkways also connect these nodes to the Basin, again partially recalling the Fair design (which also had a connection from the central node down to the Basin). Formal tree plantings line the walkways and occasional informal groupings of trees

facilitate a smooth transition from formal to informal. Flower beds and sculptures serve as focal points in the design and provide further evidence of the World's Fair legacy.

- (3) Around the lower rim of Art Hill, at the southern edge of the Basin, a linear plaza with numerous flower displays provides access to the water. (The telephone poles will be relocated.) Here festivals and fairs can occur, or simply a casual stroll. Bollards connected by chains define the water's edge. In the center of the plaza a fountain, also reminiscent of the Fair, juts out into the Basin where the jets appear to spill over into the Basin. Two rustic style gazebos are located at each lateral terminus of the linear plaza and bridges over the canals lead to two smaller plazas that face back towards Art Hill on either side of the Grand Basin.
- (4) Abutting the two smaller plazas and running along the east and west edges of the Basin is a series of "water parterres." These are semi-formal flower displays that are tilted on a slope towards the water to create colorful reflections appreciated by boaters. They are also viewable from Art Hill. In the middle of each string of parterres there is a "water theater," a shallow half-oval shaped extension of the Basin's edge around which stairs lead to the

water. Here people are encouraged to sit on the steps and view boaters in the Grand Basin or simply contemplate as they splash their feet in the water. (This is the only place along the Basin edge where people have direct contact with the water, thus reducing problems related to accident liability.)

- (5) An outdoor grass amphitheater with a fountain and a stage is sited at the north end of the Grand Basin. The amphitheater is smoothly graded in the shape of a slightly raised bowl, with a line of formal plantings defining its north edge. A ringed fountain is hidden in front of the stage and used for dramatic effect during performances. This design is fairly nonspecific and flexible. The space could be used for a music, theater or dance performance, an educational presentation, or for passive recreation. It would be the best spot from which to view Art Hill and the shape of the amphitheater echoes the shape of Art Hill, thus defining a clear conceptual linkage. (All activities connected with the amphitheater should be informal and free to the public. In this way it would serve a different function than the Municipal Theater.)
- (6) There is a long formal boardwalk that parallels a new canal from the amphitheater to a proposed plaza and water garden. The formal lines recreate the lines of

the World's Fair design and provide another opportunity for receptive passive recreation. At the end of this spine a plaza with a fountain defines a pivot point from which another spine or axis points in a southeast direction on line with the Government Hill landscape design. Moving away from the water garden towards Government Hill, the axis is first expressed in the form of a linear series of viewing decks. Then the formal line is broken and the axis becomes implied by a linear green or meadow that maintains the sight line. (Other greens have been created by the selective thinning of vegetation in order to provide more usable open space.) On the other side of Post Dispatch Lake the line is once again expressed formally by a flower walk that connects to an automobile turnaround. Again sculpture is used to enhance the design.

- (7) Post Dispatch Lake has been enlarged on its northwest end to create more space for skating and boating. A dry creek bed north of the lake has been incorporated into the water system. In addition, two lagoon areas have been carved out: one west of the Grand Basin and one south of the water garden.
- (8) The entire Core Area is the site for a proposed sculpture park. Sculptures have been located at various points throughout the Core Area, connected by

a fairly extensive system of curvilinear pedestrian pathways. Variety of effect has been the goal in siting the art: some sculptures are in the open, others mysteriously tucked away; some flooded with light, others concealed by shadows; some isolated, others clustered; some dramatic, others subtle; some formal, others naturalistic; some large, others small; some colorful, others drab. In all cases, however, the sculptures will be chosen and sited by a design professional based on artistic merit alone. The sculpture park concept will unify all of the divergent and multifaceted attractions in the Core Area and reinforce the legacy of Art Hill.

APPENDIX 1: OPERATIONAL DEFINITIONS

- (1) Active Recreation - sports-related, physical activities (softball, football, skating, soccer, running), as opposed to passive forms of recreation (picnicking, strolling, sunning).
- (2) Adaptive Reuse (or Interpretation) - the process of synthesizing contemporary user needs, existing physical conditions, and original design concepts to create a sensitive design adaptation that respects the historic integrity of its site, while providing new uses that respond to user needs.
- (3) Appropriate (or Contextual) Design - design that is sensitive to the existing functional, ecological, cultural and aesthetic landscape context.
- (4) Change Management - used here to refer to the control of design changes, where to be successful a planned approach is adhered to, and long-term goals drive design decisions.
- (5) Context - the existing physical or conceptual design framework that provides a reference against which new designs are contrasted; it should, in most cases, be respected and preserved.

- (6) Country Park - a large, naturalistic park built on the edge of a large urban area as a retreat. Influenced by naturalistic cemeteries such as Mount Auburn that were also used for passive recreation. The forerunner to the pleasure-ground park.
- (7) Current User Needs - an educated assumption (based in this study on secondary sources) about the recreational preferences of those members of the general public who currently use a given park on a fairly regular basis.
- (8) Design Concept - a combination of functional, aesthetic, thematic or philosophical ideas that shape the design process and provide meaning to physical form. Usually involves social goals.
- (9) Design Passage - used here to refer to a part of a landscape design such as a meadow, a forest or a lake that has unity of purpose and aesthetic completeness, as perceived by the park user in a sequence moving through the park. Each passage communicates a different feeling: sometimes light, open and free; other times dark and mysterious.
- (10) Encroachment - used here to refer to either a roadway or a special use which, either by its inclusion or by the way it is sited, impacts negatively on

the existing naturalistic character of an urban park. Negative impacts can be aesthetic, functional or conceptual.

- (11) Formal Design - a traditional, architectonic, classically-inspired design such as those from the Beaux Arts Period of Landscape Design; proportion, geometric shapes, symmetry and well articulated ornamentation provide connections to an architectural heritage of rich symbolism; also allied with the French Baroque Period. (The 'allee' is a French Baroque landscape element often used by Olmsted as a formal edge to a promenade.)
- (12) Historic Meaning (or Integrity) - the illusive quality that gives a landscape meaning and significance through its connection to the past, its vernacular honesty, its conceptual appropriateness, and its cultural significance.
- (13) Historic Park - a park eligible for the National Register; has significant existing contextual elements or spaces, not necessarily well preserved or consistently maintained.
- (14) Kinetic (Continuous) Experience - the psychological or behavioral experience of the landscape by the user; he or she moves from one passage to the next, retaining visual memory and

formulating a perception of the whole that reflects an individual perspective.

- (15) Layering - a term defined by Galen Cranz, referring to the unplanned accumulation of an "eclectic jumble" of design styles and special uses in urban parks, often in conflict with the original design concepts.
- (16) Long-term Landscape Maintenance - the lifetime costs related to the preservation or upkeep of a landscape including such tasks as: mowing, edging, weeding, irrigation, resodding, erosion control, chemical spraying, replacing trees and shrubs, maintaining annual beds, pruning, disease control, repairs and replacements of lights and park furniture and signage, sewer improvements, storm drainage repairs, pavement repairs, bridge repairs and the ecological stabilization of water bodies.
- (17) Naturalistic Design - the use of trees, shrubs, turf, groundcovers, landforms and water bodies to shape spatial experiences and design passages that emulate natural landscapes such as meadows, forests, glades, ridges and valleys.
- (18) Pastoral Design - a stylized "interpretation" of an idealized landscape that is simple, naturalistic, serene, contemplative and soft.

- (19) Picturesque Design - a landscape design style that reveals the rougher, more rustic, and seemingly more real aspect of nature.
- (20) Playground or (Playstead) - an active recreation area for children; theoretically it eliminates the need to provide active recreation elements such as play equipment in the natural areas that are intended for passive uses.
- (21) Pleasure-Ground Style Park - 500-1,000 acres; built 1855 to 1900; a large naturalistic park in the center of a large city, usually designed according to the design principles of F. L. Olmsted.
- (22) Promenade - a long, lineal, formal walkway lined with trees and benches that is used for passive strolling by "people of all classes" in an Olmsted pleasure-ground style park.
- (23) Ramble - the rough-seamed, picturesque, wooded passage of an Olmsted park; originally they had extensive shrubbery and ground-covers.
- (24) Spatial Extension - the use of controlled views, manipulation of texture (fine textures appear farther away), and design sequences to influence and enhance the sense of perspective experienced by the park user.

- (25) Special Use - a new functional element that can potentially encroach upon a park's design, such as: tennis courts, handball courts, ball fields, a skating rink, a boat dock, parking lots, a golf course, a zoo, an ampitheater, an arboretum, playgrounds, jogging tracks; and various architectural elements including greenhouses, gymnasiums, museum buildings, parks administration buildings, sports stadiums, maintenance structures, camping shelters and gazebos.
- (26) Stewardship - the awareness of our responsibility to manage and conserve the landscape sensitively like a parent, caring to preserve ecological and cultural context.

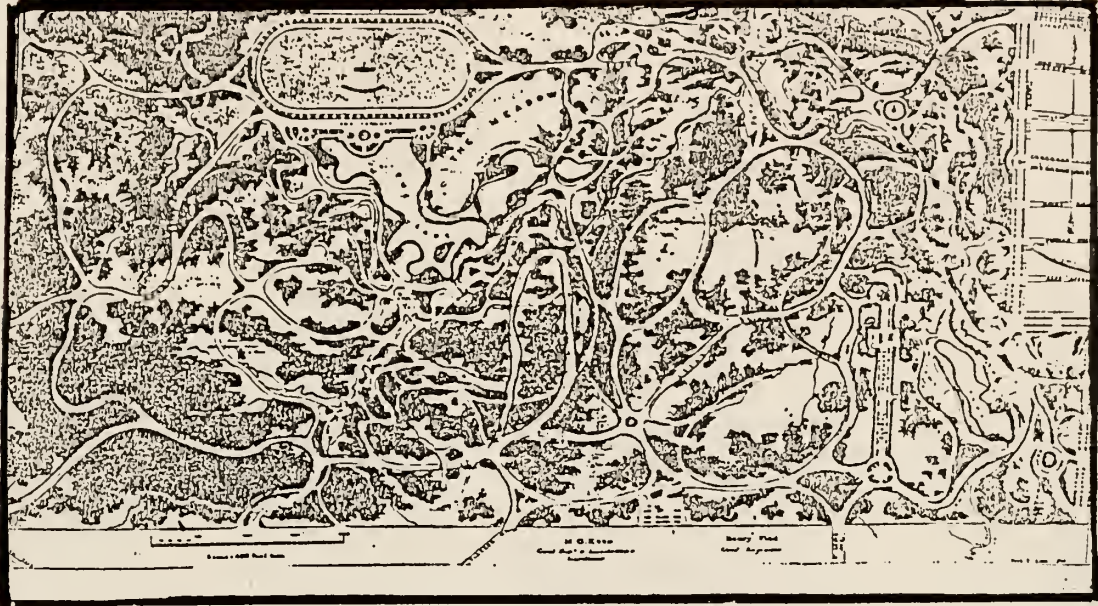
APPENDIX 2: "Indigenous Trees and Shrubs Found in Forest
in its Primitive State"

Quercus Alba	White Oak.
" Tinctoria	Black Oak.
" Rubra	Red Oak.
" Coccinea	Scarlet Oak.
" Bicolor	Swamp White Oak.
" Palustris	Pin Oak.
" Nigra	Black Jack.
" Imbricaria	Laurel Oak.
" Macrocarpa	Bur Oak.
" Obtusiloba	Post Oak.
" Aquatica	Water Oak.
" Illicifolia	Black Scrub Oak.
Carya Alba	Shell-bark Hickory.
" Microcarpa	Small Fruited Hickory.
" Tomentosa	Mockernut.
" Amara	Bitternut.
Juglans Nigra	Black Walnut.
" Cinerea	Butternut.
Platanus Occidentalis	Sycamore.
Ulmus Americana	White Elm.
" Fulva	Slippery Elm.
" Racemosa	Corky Elm.
Acer Dasycarpum	Silver Maple.
" Rubrum	Swamp Maple.
Negundo Aceroides	Ash-leaved Maple.
Aesculus Glabra	Buckeye.
Betula Nigra	Red Birch.
Tilia Americana	Linden.
Populus Monilifera	Cottonwood.
Fraxinus Viridis	Green Ash.
" Quadrangulata	Blue Ash.
" Sambucifolia	Black Ash.
Gymnocladus Canadensis	Kentucky Coffee Tree.
Gleditschia Triacanthos	Honey Locust.
" Monosperma	Water Locust.
Clorus Rubra	Red Mulberry.
Celtis Occidentalis	Hackberry.
Nyssa Multiflora	Sour Gum.
Prunus Serotina	Wild Cherry.
" Americana	Wild Plum.
Cercis Canadensis	Red Bud.
Sassafras Officinale	Sassafras.
Asimina Triloba	Papaw.
Salix Fragilis	Brittle Willow.
" Nigra	Black Willow.
" Humilis	Prarie Willow.

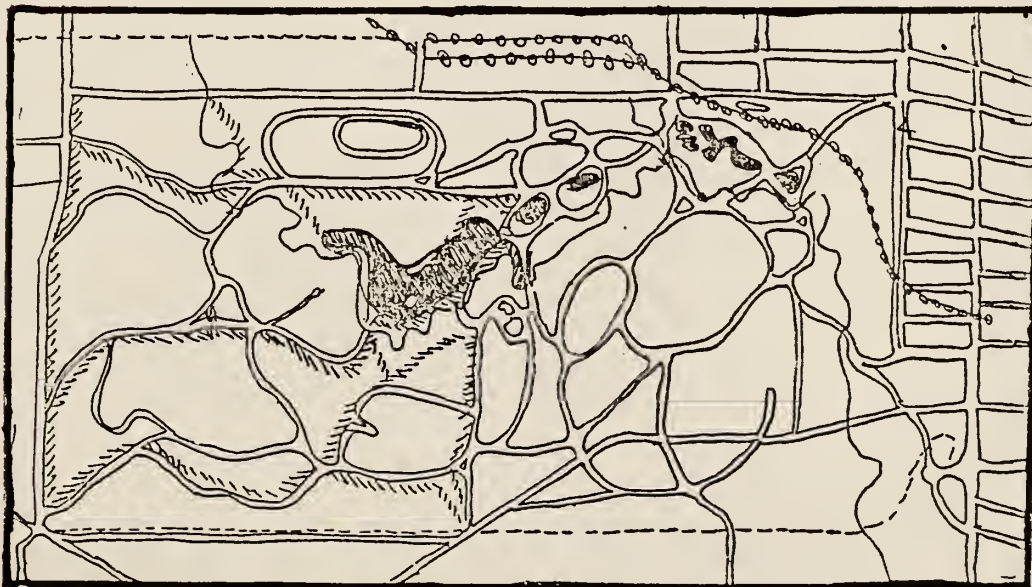
Pyrus Coronaria	Crab Apple.
Crataegus Tomentosa	Black Thorn.
" Coccinea	Red-fruited Thorn.
Rhus Typhina	Sumach.
Rhamnus Lanceolatus	Buck Thorn.
Evonimus Americana	Strawberry Bush.
Sambucus Canadensis	Elder.
Cornus Florida	Flowering Dogwood.
" Paniculata	Dogwood.
Hydrangea Arborescens	
Ribes Grossularia	Wild Gooseberry.
Rosa Setigera	Prarie Rose.
Rubus Strigosus	Wild Raspberry.
" Villosus	Blackberry.
" Canadensis	Dewberry.
Symphoricarpus Vulgaris	Indian Currant.
Corylus Americana	Hazelnut.
Vitis Labrusca	Wild Vine.
Ampelopsis Quinquefolia	Virginian Creeper.
Celastrus Scandens	Staff Tree.
Smilax Rotundifolia	Green Briar.
Rhus Toxicodendron	Poison Vine.

APPENDIX 3: A Chronology of Forest Park Maps

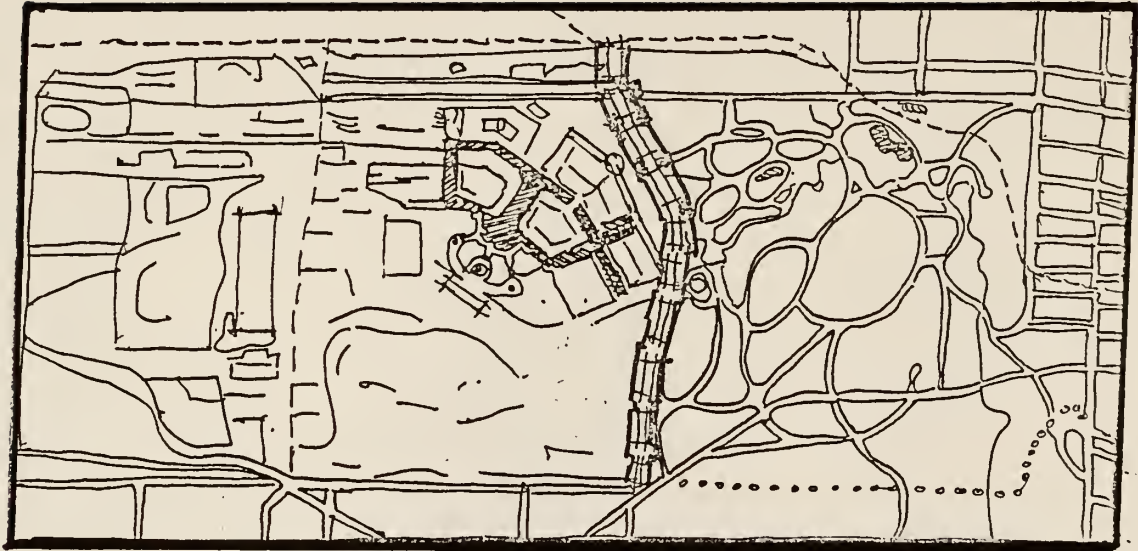
1876 Plan



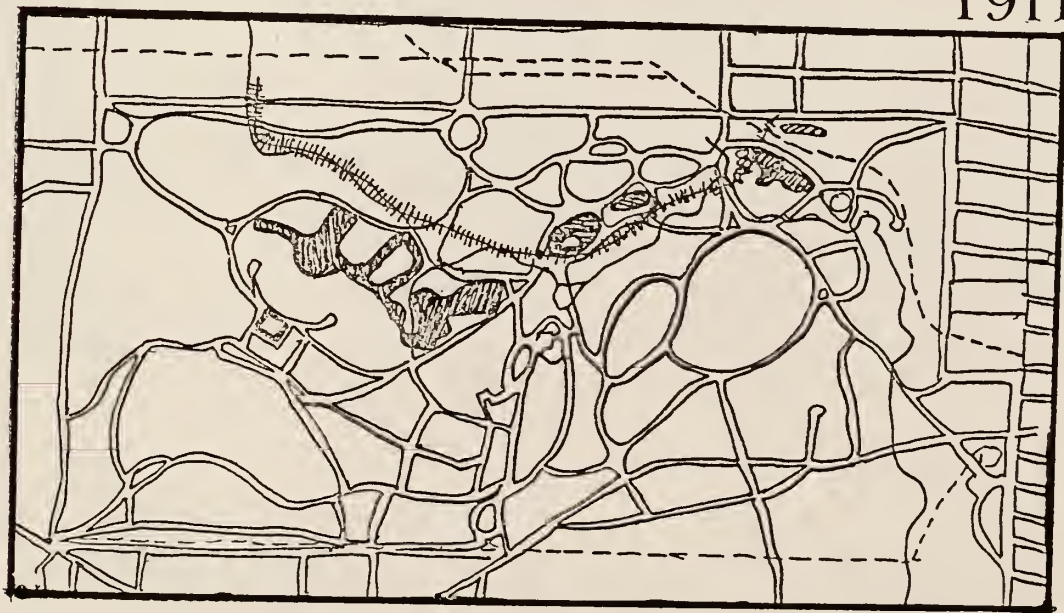
1876 - 1901



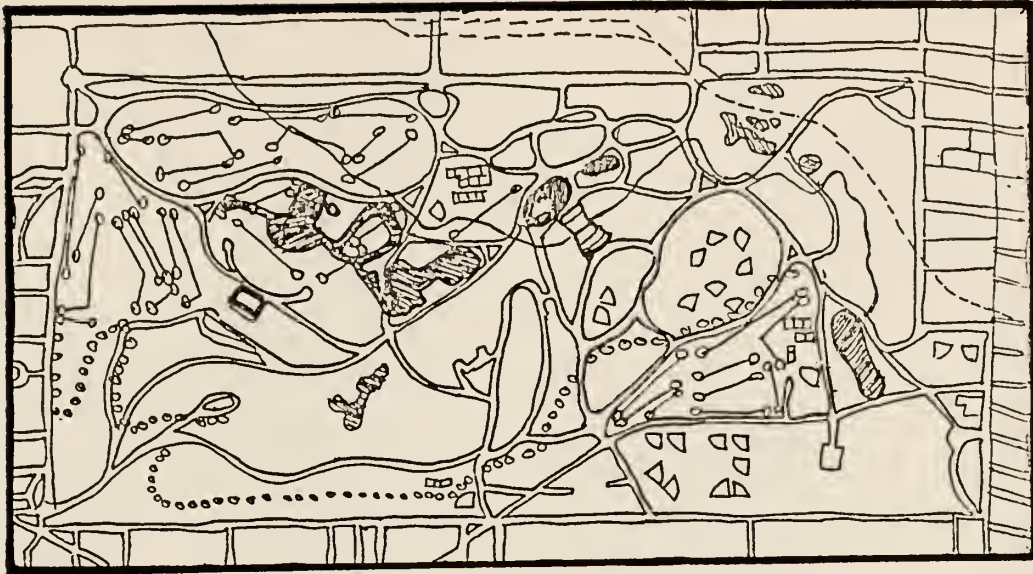
1904



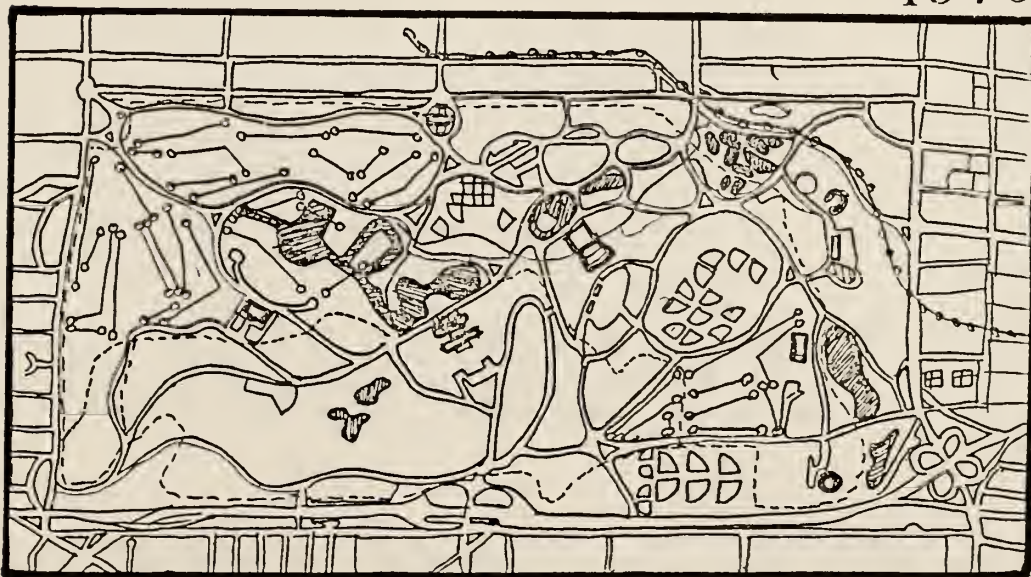
1911



1930



1976



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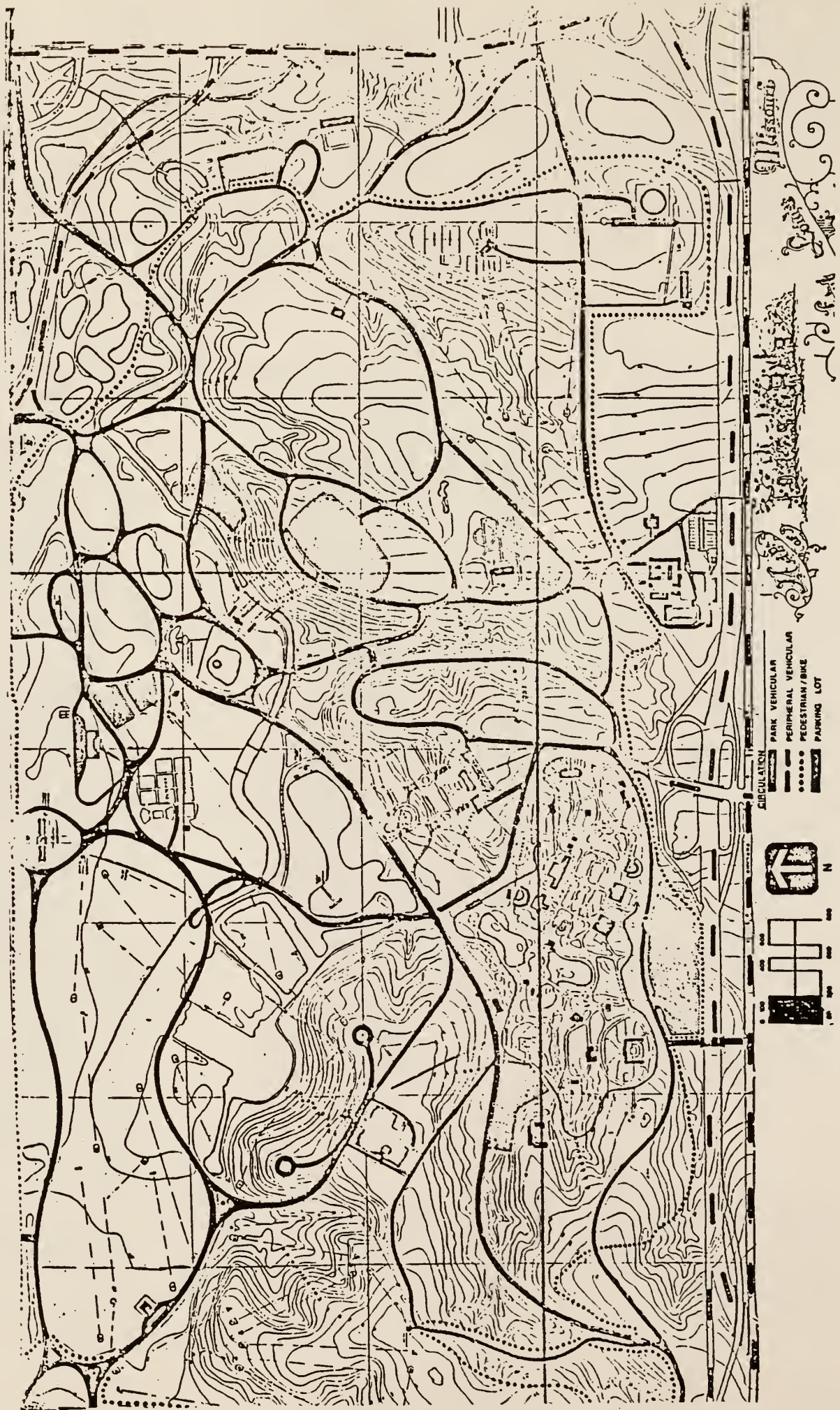
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MAP #1:
FOREST PARK



MAP #2:
1904 WORLD'S FAIR

FOREST PARK

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THE CHANGING CONTEXT OF HISTORIC URBAN PARKS:
AN ANALYSIS OF ADAPTIVE REUSE TECHNIQUES AND PHILOSOPHIES

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ABSTRACT

THE CHANGING CONTEXT OF HISTORIC URBAN PARKS: AN ANALYSIS OF ADAPTIVE REUSE TECHNIQUES AND PHILOSOPHIES

This study attempts to determine whether or not "layering" (as Galen Cranz defines it) is a significant problem in one large scale, "pleasure-ground" style urban park and if so, what are the most effective design strategies to manage this problem. It will focus on the relationship between these strategies and the design concepts of the original designers. A detailed analysis of the design concepts articulated by Frederick Law Olmsted will serve as a guide to understanding the theories behind large scale, "pleasure-ground" style historic urban parks. This thesis will trace the history of design changes in a specific park (Forest Park), showing how decisions related to new uses and new styles have been made in the past and which strategies have been effective. The final product will be a proposal of specific design recommendations for the park as a whole, as well as a detailed site plan proposal for the Core Area of the park. It is hoped that this study will yield insights about the challenge of incorporating contemporary uses into historic parks while preserving their existing meaning and context.

